SEQ ID NO: 14422

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=> d a65843a01/a ;d query
NAME             CREATED      NOTES/TITLE
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A65843A01/A      06 FEB 2002  3 ANSWERS DUPLICATE REMOVE
                                 (0 DUPLICATES REMOVED)
                              3 ANSWERS IN FILE HCAPLUS
                              HLA-A2  HIV GAG 386


L1          218 SEA FILE=REGISTRY VLAEAMSQV/SQSP
L2            6 SEA FILE=REGISTRY L1 AND SQL < 15
L3           10 SEA FILE=HCAPLUS L2
L4            1 SEA FILE=HCAPLUS L3 AND 19930101-19930305/PD,AD,PRD
L5            2 SEA FILE=HCAPLUS L3 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)

L6            3 SEA FILE=HCAPLUS L4 OR L5
L7          119 SEA FILE=DGENE VLAEAMSQV/SQSP
L8            5 SEA FILE=DGENE L7 AND SQL < 15
L9            4 SEA FILE=DGENE L8 NOT (AU9463594/PN OR AU9865979/PN OR
                BR9406652/PN OR CA2157510/PN OR CN1118572/PN OR EP703783/PN OR
                JP08507525/PN OR WO9420127/PN)
L10           0 SEA FILE=DGENE L9 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)
L11           0 SEA FILE=DGENE L9 AND 19930101-19930305/PD,AD,PRD
L12           0 SEA FILE=DGENE L10 OR L11
L13           3 DUP REM L6 L12 (0 DUPLICATES REMOVED)


=> d 1-3 bib abs hitseq

L13  ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2002 ACS
AN   1995:294003  HCAPLUS
DN   122:263516
TI   HLA-A2.1 binding peptides and their detection and uses
IN   Grey, Howard M.; Sette, Alessandro; Sidney, John; Kast, W. Martin
PA   Cytel Corp., USA
SO   PCT Int. Appl., 138 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.         KIND  DATE          APPLICATION NO.  DATE
     ---------------    ----  --------      ---------------  --------
PI   WO 9420127         A1    19940915      WO 1994-US2353   19940304 <-- 58,30
         W:  AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU,
             JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO,
             RU, SD, SE, SI, SK, UA, UZ, VN
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
             BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
     CA 2157510          AA    19940915      CA 1994-2157510  19940304 <--
     AU 9463594          A1    19940926      AU 1994-63594    19940304 <--
     CN 1118572          A     19960313      CN 1994-191364   19940304 <--
     EP 703783           A1    19960403      EP 1994-910837   19940304 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
     JP 08507525         T2    19960813      JP 1994-520190   19940304 <--
     BR 9406652          A     19960910      BR 1994-6652     19940304 <--
     AU 9865979          A1    19980702      AU 1998-65979    19980518 <--
PRAI US 1993-27146 58,00         19930305  <--
     US 1993-73205 58,10         19930604
     US 1993-159184 58,20        19931129
```

WO 1994-US2353 19940304

AB An algorithm for selecting immunogenic oligopeptides capable of specifically binding glycoproteins encoded by HLA-A2.1 allele and inducing T cell activation in T cells restricted by the A2.1 allele. The peptides are useful to elicit an immune response against a target antigen. Identification of immunogenic oligopeptides from viral or tumor-related proteins was demonstrated.

IT **160214-68-6**
(HLA-A2.1-binding immunogenic peptide and algorithm for its identification)

RN 160214-68-6 HCAPLUS

CN L-Valine, L-valyl-L-leucyl-L-alanyl-L-α-glutamyl-L-alanyl-L-methionyl-L-seryl-L-glutaminyl- (9CI) (CA INDEX NAME)

SEQ 1 VLAEAMSQV

Absolute stereochemistry.

L13 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2002 ACS

AN 1991:58080 HCAPLUS

DN 114:58080

TI Characterization of an active single polypeptide form of the human immunodeficiency virus type 1 protease

AU DiIanni, Carolyn L.; Davis, Lenora J.; Holloway, M. Katharine; Herber, Wayne K.; Darke, Paul L.; Kohl, Nancy E.; Dixon, Richard A. F.

CS Dep. Mol. Biol., Merck Sharp and Dohme Res. Lab., West Point, PA, 19486, USA

SO J. Biol. Chem. (1990), 265(28), 17348-54
CODEN: JBCHA3; ISSN: 0021-9258

DT Journal

LA English

AB The pepsin-like aspartyl proteases consist of a single polypeptide chain with topol. similar N- and C-terminal domains, each of which contributes 1 aspartic acid residue to the active site. This structure has been proposed to have evolved by gene duplication and fusion from a dimeric enzyme composed of two identical polypeptide chains, such as the aspartyl protease (PRT) of human immunodeficiency virus type 1 (HIV-1). To det. if a single polypeptide form of the HIV-1 protease would be enzymically active, two protease coding regions were linked to form a dimeric gene (pFGGP). Expression of this gene in Escherichia coli yielded a protein with the expected mol. mass of 22 kDa. The in vitro kinetic parameters of PRT and FGGP (where FGGP is the single polypeptide form of the HIV-1 protease with 2 glycine residues connecting the two subunits) for three peptide substrates are similar. Construction and anal. of a CheY-GAG-FGGP fusion protein demonstrated that FGGP is capable of precursor processing in vivo. Mutation of one or both of the active site aspartates to either asparagine or glutamate rendered the enzyme inactive, demonstrating that both active site aspartate residues are required for enzymic activity.

IT **118506-24-4**
(reaction of, with aspartate protease native and active single polypeptide form of human HIV-1, kinetics of)

RN 118506-24-4 HCAPLUS

CN L-Valine, glycyl-L-histidyl-L-lysyl-L-alanyl-L-arginyl-L-valyl-L-leucyl-L-alanyl-L-α-glutamyl-L-alanyl-L-methionyl-L-seryl-L-glutaminyl- (9CI) (CA INDEX NAME)

SEQ 1 GHKARVLAEA MSQV

Absolute stereochemistry.

L13 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2002 ACS
AN 1989:53546 HCAPLUS
DN 110:53546
TI HIV-1 protease specificity of peptide cleavage is sufficient for processing of gag and pol polyproteins
AU Darke, Paul L.; Nutt, Ruth F.; Brady, Stephen F.; Garsky, Victor M.; Ciccarone, Terrence M.; Leu, Chih Tai; Lumma, Patricia K.; Freidinger, Roger M.; Veber, Daniel F.; Sigal, Irving S.
CS Dep. Mol. Biol., Merck Sharp and Dohme Res. Lab., West Point, PA, 19486, USA
SO Biochem. Biophys. Res. Commun. (1988), 156(1), 297-303
CODEN: BBRCA9; ISSN: 0006-291X
DT Journal
LA English
AB A 99-amino acid HIV-1 protease, produced by chem. synthesis or by expression in bacteria, is shown here to hydrolyze peptides corresponding to all of the known cleavage sites in the HIV-1 gag and pol polyproteins. It does not hydrolyze peptides corresponding to an env cleavage site or a distantly related retroviral gag cleavage site.
IT **118506-24-4**
(reaction of, with protease of HIV-1, kinetics of)
RN 118506-24-4 HCAPLUS
CN L-Valine, glycyl-L-histidyl-L-lysyl-L-alanyl-L-arginyl-L-valyl-L-leucyl-L-alanyl-L-α-glutamyl-L-alanyl-L-methionyl-L-seryl-L-glutaminyl- (9CI) (CA INDEX NAME)

SEQ 1 GHKARVLAEA MSQV

Absolute stereochemistry.

=>

SEQ ID NO: 14457

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=> d a65843a02/a ; d que
NAME            CREATED      NOTES/TITLE
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A65843A02/A     06 FEB 2002  2 ANSWERS DUPLICATE REMOVE
                               (0 DUPLICATES REMOVED)
                             1 ANSWER IN FILE HCAPLUS
                             1 ANSWER IN FILE DGENE
                             HLA-A1  HIV POL 684


L1          204 SEA FILE=REGISTRY EVNIVTDSQY/SQSP
L2            3 SEA FILE=REGISTRY L1 AND SQL < 15
L3            6 SEA FILE=HCAPLUS L2
L4            1 SEA FILE=HCAPLUS L3 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)

L5            1 SEA FILE=HCAPLUS L3 AND 19930101-19930806/PD,AD,PRD
L6            1 SEA FILE=HCAPLUS L4 OR L5
L7           60 SEA FILE=DGENE EVNIVTDSQY/SQSP
L8            4 SEA FILE=DGENE L7 AND SQL < 15
L9            4 SEA FILE=DGENE L8 NOT (US5662907/PN OR US6037135/PN)
L10           1 SEA FILE=DGENE L9 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)
L11           1 SEA FILE=DGENE L9 AND 19930101-19930806/PD,AD,PRD
L12           1 SEA FILE=DGENE L10 OR L11
L13           2 DUP REM L6 L12 (0 DUPLICATES REMOVED)


=> d bib abs hitseq 1 ; d bib ab seq 2

L13  ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2002 ACS
AN   2000:172837  HCAPLUS
DN   132:221339
TI   Methods for making HLA binding peptides and their uses
IN   Kubo, Ralph T.; Grey, Howard M.; Sette, Alessandro; Celis, Esteban
PA   Epimmune Inc., USA
SO   U.S., 329 pp., Cont.-in-part of U.S. Ser. No. 103,396, abandoned.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 4
     PATENT NO.          KIND  DATE            APPLICATION NO.  DATE
     ------------------  ----  --------        ---------------  --------
PI   US 6037135 50.70    A     20000314        US 1993-159339   19931129 <--
     US 5662907 50.40    A     19970902        US 1994-186266   19940125 <--
PRAI US 1992-926666 50.00      19920807  <--
     US 1993-27746 50.10       19930305  <--
     US 1993-103396 50.20      19930806  <--
     US 1993-159339 50.70      19931129
AB   Disclosed are methods for making peptides comprising an HLA-A24.1-, HLA-A1-,
     HLA-A11-, and HLA-A3.2-restricted T cell epitope consisting of about 8-11
     amino acid residues, and methods of making a peptide that binds to an HLA-
     A24.1, HLA-A1, HLA-A11, and HLA-A3.2 mol. at a dissocn. const. of less than
     500 nM.  Epitopes on a no. of potential target proteins (e.g. prostate
     specific antigen, hepatitis B core and surface antigens, hepatitis C antigen,
     malignant melanoma antigen MAGE-1, Epstein-Barr virus antigens, HIV-1 and
     papilloma virus antigen) are identified.  These HLA-binding peptides are
     useful for treating and diagnosing a no. of pathol. states such as viral
     infection and cancer.
IT   245443-27-0
        (HLA binding epitopes of viral and tumor antigen for treatment and
```

diagnosis)
RN 245443-27-0 HCAPLUS
CN L-Tyrosine, L-α-glutamyl-L-valyl-L-asparaginyl-L-isoleucyl-L-valyl-L-threonyl-L-α-aspartyl-L-seryl-L-glutaminyl- (9CI) (CA INDEX NAME)

SEQ 1 EVNIVTDSQY

Absolute stereochemistry.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 2 DGENE COPYRIGHT 2002 DERWENT INFORMATION LTD
AN AAY38217 Peptide DGENE
TI Peptide which specifically binds selected MHC allele - used to induce an immune response for treatment or prevention of viral infection or cancer, or for diagnosis
IN Celis E; Grey H M; Kubo R T; Sette A
PA (CYTE-N) CYTEL CORP.
PI WO 9403205 A1 19940217 50.10 pi 150p
AI WO 1993-US7421 19930806
PRAI US 1993-27746 19930305 50.10
US 1992-926666 19920807 50.00
DT Patent
LA English
OS 1994-065403 [08]
AB The sequence is a specific example of a group of new immunogenic peptides having an HLA-A3.2, HLA-A1, HLA-A11 or HLA-A24.1 binding motif. For example, the peptides having an HLA-A3.2 binding motif each have 9-10 residues and contain, from the N-terminus to the C-terminus, (a) a first conserved residue selected from L, M, I, V, S, A, T, F, C, G, D and E and (b) a second conserved residue of K, R, Y, H or F, where the first and second conserved residues are separated by 6-7 residues. The peptides are capable of binding selected MHC molecules and inducing an immune response. They can be used to treat and/or prevent viral infection and cancer, e.g. prostate cancer, lymphoma, hepatitis or AIDS. They can also be used to produce antibodies for use as diagnostic or therapeutic agents. The peptides can also be used as diagnostic agents.
SEQ
1 evnivtdsqy
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HITS AT: 1-10

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SEQ ID NO: 14458

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=> d a65843a03/a ; d query
NAME            CREATED      NOTES/TITLE
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A65843A03/A     06 FEB 2002  3 ANSWERS DUPLICATE REMOVE
                               (0 DUPLICATES REMOVED)
                             2 ANSWERS IN FILE HCAPLUS
                             1 ANSWER IN FILE DGENE
                             HLA-A1  HIV GAG 317


L1          415 SEA FILE=REGISTRY FRDYVDRFY/SQSP
L2            7 SEA FILE=REGISTRY L1 AND SQL < 15
L3           14 SEA FILE=HCAPLUS L2
L4            1 SEA FILE=HCAPLUS L3 AND 19930101-19930806/PD,AD,PRD
L5            2 SEA FILE=HCAPLUS L3 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)

L6            2 SEA FILE=HCAPLUS L4 OR L5
L7          392 SEA FILE=DGENE FRDYVDRFY/SQSP
L8            7 SEA FILE=DGENE L7 AND SQL < 15
L9            7 SEA FILE=DGENE L8 NOT (US5662907/PN OR US6037135/PN)
L10           1 SEA FILE=DGENE L9 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)
L11           1 SEA FILE=DGENE L9 AND 19930101-19930806/PD,AD,PRD
L12           1 SEA FILE=DGENE L10 OR L11
L13           3 DUP REM L6 L12 (0 DUPLICATES REMOVED)


=> d 1-3 bib abs seq hitseq

L13  ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2002 ACS
AN   2000:172837  HCAPLUS
DN   132:221339
TI   Methods for making HLA binding peptides and their uses
IN   Kubo, Ralph T.; Grey, Howard M.; Sette, Alessandro; Celis, Esteban
PA   Epimmune Inc., USA
SO   U.S., 329 pp., Cont.-in-part of U.S. Ser. No. 103,396, abandoned.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 4
     PATENT NO.          KIND  DATE            APPLICATION NO.  DATE
     ------------------  ----  --------        ---------------  --------
PI   US 6037135 50.30    A     20000314        US 1993-159339   19931129 <--
     US 5662907 50.40    A     19970902        US 1994-186266   19940125 <--
PRAI US 1992-926666              19920807  <--
     US 1993-27746               19930305  <--
     US 1993-103396              19930806  <--
     US 1993-159339              19931129
AB   Disclosed are methods for making peptides comprising an HLA-A24.1-, HLA-A1-,
     HLA-A11-, and HLA-A3.2-restricted T cell epitope consisting of about 8-11
     amino acid residues, and methods of making a peptide that binds to an HLA-
     A24.1, HLA-A1, HLA-A11, and HLA-A3.2 mol. at a dissocn. const. of less than
     500 nM.  Epitopes on a no. of potential target proteins (e.g. prostate
     specific antigen, hepatitis B core and surface antigens, hepatitis C antigen,
     malignant melanoma antigen MAGE-1, Epstein-Barr virus antigens, HIV-1 and
     papilloma virus antigen) are identified.  These HLA-binding peptides are
     useful for treating and diagnosing a no. of pathol. states such as viral
     infection and cancer.
IT   250728-51-9
        (HLA binding epitopes of viral and tumor antigen for treatment and
```

diagnosis)
RN 250728-51-9 HCAPLUS
CN L-Tyrosine, L-phenylalanyl-L-arginyl-L-α-aspartyl-L-tyrosyl-L-valyl-L-α-aspartyl-L-arginyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

SEQ 1 FRDYVDRFY

Absolute stereochemistry.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2002 ACS
AN 1991:245753 HCAPLUS
DN 114:245753
TI Monoclonal antibodies to conserved regions of the major core protein (gag24) of HIV-1 and HIV-2
AU Carpio, Emilio; Duarte, Carlos; Hinkula, Jorma; Broliden, Per Anders; Rosen, Jon; Campal, Ana; Gavilondo, Jorge; Wahren, Britta; Jondal, Mikael
CS Hybridoma Div., Cent. Genet. Eng. Biotechnol., Havana, Cuba
SO AIDS Res. Hum. Retroviruses (1991), 7(1), 97-101
CODEN: ARHRE7; ISSN: 0889-2229
DT Journal
LA English
AB Five mouse monoclonal antibodies were raised against a recombinant protein comprising the complete sequence of gag24 protein from HTLV-IIIB. All monoclonal antibodies recognized the native protein in ELISA and Western blots. All monoclonal antibodies also cross-reacted with a human immunodeficiency virus type 2 (HIV-2) strain in Western blots, whereas only one antibody detected HIV-2 p25 in ELISA. By using synthetic peptides, cross-reacting epitopes were mapped and 3 regions were defined. The conserved immunogenic sites were located in the C-terminal region of the protein. Inhibition expts. with human sera showed that this region is also immunogenic in humans.
IT **133989-50-1**
(as gag protein p24 epitope of human immunodeficiency virus 1)
RN 133989-50-1 HCAPLUS
CN L-Lysine, L-phenylalanyl-L-arginyl-L-α-aspartyl-L-tyrosyl-L-valyl-L-α-aspartyl-L-arginyl-L-phenylalanyl-L-tyrosyl- (9CI) (CA INDEX NAME)

SEQ 1 FRDYVDRFYK

Absolute stereochemistry.

L13 ANSWER 3 OF 3 DGENE COPYRIGHT 2002 DERWENT INFORMATION LTD
AN AAY38211 Peptide DGENE
TI Peptide which specifically binds selected MHC allele - used to induce an immune response for treatment or prevention of viral infection or cancer, or for diagnosis
IN Celis E; Grey H M; Kubo R T; Sette A
PA (CYTE-N) CYTEL CORP.
PI WO 9403205 A1 19940217 50.10pc 150p
AI **WO 1993-US7421 19930806**

PRAI US 1993-27746 19930305
US 1992-926666 19920807
DT Patent
LA English
OS 1994-065403 [08]
AN AAY38211 Peptide DGENE
AB The sequence is a specific example of a group of new immunogenic peptides having an HLA-A3.2, HLA-A1, HLA-A11 or HLA-A24.1 binding motif. For example, the peptides having an HLA-A3.2 binding motif each have 9-10 residues and contain, from the N-terminus to the C-terminus, (a) a first conserved residue selected from L, M, I, V, S, A, T, F, C, G, D and E and (b) a second conserved residue of K, R, Y, H or F, where the first and second conserved residues are separated by 6-7 residues. The peptides are capable of binding selected MHC molecules and inducing an immune response. They can be used to treat and/or prevent viral infection and cancer, e.g. prostate cancer, lymphoma, hepatitis or AIDS. They can also be used to produce antibodies for use as diagnostic or therapeutic agents. The peptides can also be used as diagnostic agents.

SEQ
1 frdyvdrfy
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HITS AT: 1-9

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SEQ ID NO: 14459

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=> d a65843a04/a ;d query
NAME             CREATED      NOTES/TITLE
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A65843A04/A      06 FEB 2002  1 ANSWER DUPLICATE REMOVE
                                 (0 DUPLICATES REMOVED)
                              1 ANSWER IN FILE HCAPLUS
                              HIV POL 368


L1          548 SEA FILE=REGISTRY VIYQYMDDLY/SQSP
L2            3 SEA FILE=REGISTRY L1 AND SQL < 15
L3            7 SEA FILE=HCAPLUS L2
L4            1 SEA FILE=HCAPLUS L3 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)

L5            1 SEA FILE=HCAPLUS L3 AND 19930101-19930806/PD,AD,PRD
L6            1 SEA FILE=HCAPLUS L4 OR L5
L7          118 SEA FILE=DGENE VIYQYMDDLY/SQSP
L8            2 SEA FILE=DGENE L7 AND SQL < 15
L9            2 SEA FILE=DGENE L8 NOT (US5662907/PN OR US6037135/PN)
L10           0 SEA FILE=DGENE L9 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)
L11           0 SEA FILE=DGENE L9 AND 19930101-19930806/PD,AD,PRD
L12           0 SEA FILE=DGENE L10 OR L11
L13           1 DUP REM L6 L12 (0 DUPLICATES REMOVED)


=> d bib ab hitseq

L13  ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2002 ACS
AN   2000:172837  HCAPLUS
DN   132:221339
TI   Methods for making HLA binding peptides and their uses
IN   Kubo, Ralph T.; Grey, Howard M.; Sette, Alessandro; Celis, Esteban
PA   Epimmune Inc., USA
SO   U.S., 329 pp., Cont.-in-part of U.S. Ser. No. 103,396, abandoned.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 4
     PATENT NO.          KIND  DATE           APPLICATION NO.  DATE
     ------------------  ----  --------       ---------------  --------
PI   US 6037135 59.1     A     20000314       US 1993-159339   19931129 <--
     US 5662907 50.40    A     19970902       US 1994-186266   19940125 <--
PRAI US 1992-926666             19920807  <--
     US 1993-27746              19930305  <--
     US 1993-103396             19930806  <--
     US 1993-159339             19931129
AB   Disclosed are methods for making peptides comprising an HLA-A24.1-, HLA-A1-,
     HLA-A11-, and HLA-A3.2-restricted T cell epitope consisting of about 8-11
     amino acid residues, and methods of making a peptide that binds to an HLA-
     A24.1, HLA-A1, HLA-A11, and HLA-A3.2 mol. at a dissocn. const. of less than
     500 nM. Epitopes on a no. of potential target proteins (e.g. prostate
     specific antigen, hepatitis B core and surface antigens, hepatitis C antigen,
     malignant melanoma antigen MAGE-1, Epstein-Barr virus antigens, HIV-1 and
     papilloma virus antigen) are identified. These HLA-binding peptides are
     useful for treating and diagnosing a no. of pathol. states such as viral
     infection and cancer.
IT   194476-82-9
        (HLA binding epitopes of viral and tumor antigen for treatment and
        diagnosis)
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RN 194476-82-9 HCAPLUS
CN L-Tyrosine, L-valyl-L-isoleucyl-L-tyrosyl-L-glutaminyl-L-tyrosyl-L-methionyl-L-α-aspartyl-L-α-aspartyl-L-leucyl- (9CI) (CA INDEX NAME)

SEQ 1 VIYQYMDDLY

Absolute stereochemistry.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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SEQ ID NO:14460

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=> d a65843a05/a ;d query
NAME             CREATED      NOTES/TITLE
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A65843A05/A      06 FEB 2002  3 ANSWERS DUPLICATE REMOVE
                                 (0 DUPLICATES REMOVED)
                              1 ANSWER IN FILE HCAPLUS
                              2 ANSWERS IN FILE DGENE
                              HLA-A1  HIV POL 295


L1          741 SEA FILE=REGISTRY VTVLDVGDAY/SQSP
L2            3 SEA FILE=REGISTRY L1 AND SQL < 15
L3            6 SEA FILE=HCAPLUS L2
L4            1 SEA FILE=HCAPLUS L3 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)

L5            1 SEA FILE=HCAPLUS L3 AND 19930101-19930806/PD,AD,PRD
L6            1 SEA FILE=HCAPLUS L4 OR L5
L7          164 SEA FILE=DGENE VTVLDVGDAY/SQSP
L8            6 SEA FILE=DGENE L7 AND SQL < 15
L9            6 SEA FILE=DGENE L8 NOT (US5662907/PN OR US6037135/PN)
L10           2 SEA FILE=DGENE L9 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)
L11           2 SEA FILE=DGENE L9 AND 19930101-19930806/PD,AD,PRD
L12           2 SEA FILE=DGENE L10 OR L11
L13           3 DUP REM L6 L12 (0 DUPLICATES REMOVED)


=> d 1-tot bib abs hitseq seq

L13  ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2002 ACS
AN   2000:172837  HCAPLUS
DN   132:221339
TI   Methods for making HLA binding peptides and their uses
IN   Kubo, Ralph T.; Grey, Howard M.; Sette, Alessandro; Celis, Esteban
PA   Epimmune Inc., USA
SO   U.S., 329 pp., Cont.-in-part of U.S. Ser. No. 103,396, abandoned.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 4
     PATENT NO.          KIND  DATE           APPLICATION NO.  DATE
     ------------------  ----  --------       ---------------  --------
PI   US 6037135 59.30    A     20000314       US 1993-159339   19931129 <--
     US 5662907 57.46    A     19970902       US 1994-186266   19940125 <--
PRAI US 1992-926666             19920807  <--
     US 1993-27746              19930305  <--
     US 1993-103396             19930806  <--
     US 1993-159339             19931129
AB   Disclosed are methods for making peptides comprising an HLA-A24.1-, HLA-A1-,
     HLA-A11-, and HLA-A3.2-restricted T cell epitope consisting of about 8-11
     amino acid residues, and methods of making a peptide that binds to an HLA-
     A24.1, HLA-A1, HLA-A11, and HLA-A3.2 mol. at a dissocn. const. of less than
     500 nM.  Epitopes on a no. of potential target proteins (e.g. prostate
     specific antigen, hepatitis B core and surface antigens, hepatitis C antigen,
     malignant melanoma antigen MAGE-1, Epstein-Barr virus antigens, HIV-1 and
     papilloma virus antigen) are identified.  These HLA-binding peptides are
     useful for treating and diagnosing a no. of pathol. states such as viral
     infection and cancer.
IT   250728-54-2
        (HLA binding epitopes of viral and tumor antigen for treatment and
```

diagnosis)
RN 250728-54-2 HCAPLUS
CN L-Tyrosine, L-valyl-L-threonyl-L-valyl-L-leucyl-L-α-aspartyl-L-valylglycyl-L-α-aspartyl-L-alanyl- (9CI) (CA INDEX NAME)

SEQ 1 VTVLDVGDAY

Absolute stereochemistry.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 3 DGENE COPYRIGHT 2002 DERWENT INFORMATION LTD
AN AAY38216 Peptide DGENE
TI Peptide which specifically binds selected MHC allele - used to induce an immune response for treatment or prevention of viral infection or cancer, or for diagnosis
IN Celis E; Grey H M; Kubo R T; Sette A
PA (CYTE-N) CYTEL CORP.
PI WO 9403205 A1 19940217 50.10Pv 150p
AI **WO 1993-US7421 19930806**
PRAI **US 1993-27746 19930305**
US 1992-926666 19920807
DT Patent
LA English
OS 1994-065403 [08]
AN AAY38216 Peptide DGENE
AB The sequence is a specific example of a group of new immunogenic peptides having an HLA-A3.2, HLA-A1, HLA-A11 or HLA-A24.1 binding motif. For example, the peptides having an HLA-A3.2 binding motif each have 9-10 residues and contain, from the N-terminus to the C-terminus, (a) a first conserved residue selected from L, M, I, V, S, A, T, F, C, G, D and E and (b) a second conserved residue of K, R, Y, H or F, where the first and second conserved residues are separated by 6-7 residues. The peptides are capable of binding selected MHC molecules and inducing an immune response. They can be used to treat and/or prevent viral infection and cancer, e.g. prostate cancer, lymphoma, hepatitis or AIDS. They can also be used to produce antibodies for use as diagnostic or therapeutic agents. The peptides can also be used as diagnostic agents.

SEQ
1 vtvldvgday
==========
HITS AT: 1-10

L13 ANSWER 3 OF 3 DGENE COPYRIGHT 2002 DERWENT INFORMATION LTD
AN AAY38214 Peptide DGENE
TI Peptide which specifically binds selected MHC allele - used to induce an immune response for treatment or prevention of viral infection or cancer, or for diagnosis
IN Celis E; Grey H M; Kubo R T; Sette A
PA (CYTE-N) CYTEL CORP.
PI WO 9403205 A1 19940217 50.10Pv 150p
AI **WO 1993-US7421 19930806**
PRAI **US 1993-27746 19930305**
US 1992-926666 19920807
DT Patent
LA English
OS 1994-065403 [08]

AN AAY38214 Peptide DGENE

AB The sequence is a specific example of a group of new immunogenic peptides having an HLA-A3.2, HLA-A1, HLA-A11 or HLA-A24.1 binding motif. For example, the peptides having an HLA-A3.2 binding motif each have 9-10 residues and contain, from the N-terminus to the C-terminus, (a) a first conserved residue selected from L, M, I, V, S, A, T, F, C, G, D and E and (b) a second conserved residue of K, R, Y, H or F, where the first and second conserved residues are separated by 6-7 residues. The peptides are capable of binding selected MHC molecules and inducing an immune response. They can be used to treat and/or prevent viral infection and cancer, e.g. prostate cancer, lymphoma, hepatitis or AIDS. They can also be used to produce antibodies for use as diagnostic or therapeutic agents. The peptides can also be used as diagnostic agents.

SEQ

1 vtvldvgday

==========

HITS AT: 1-10

=> Ans 1 of 2 & 3 of 3 same except for the "AN" number. Seems like the peptide was entered into the DB twice.

SEQ ID NO: 14461

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=> d a65843a06/a ;d query
NAME            CREATED      NOTES/TITLE
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A65843A06/A     06 FEB 2002  2 ANSWERS DUPLICATE REMOVE
                               (0 DUPLICATES REMOVED)
                             1 ANSWER IN FILE HCAPLUS
                             1 ANSWER IN FILE DGENE
                             HLA-A24 HIV POL 533


L1          291 SEA FILE=REGISTRY IYQEPPFKNL/SQSP
L2            5 SEA FILE=REGISTRY L1 AND SQL < 15
L3           11 SEA FILE=HCAPLUS L2
L4            1 SEA FILE=HCAPLUS L3 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)

L5            1 SEA FILE=HCAPLUS L3 AND 19930101-19930806/PD,AD,PRD
L6            1 SEA FILE=HCAPLUS L4 OR L5
L7           76 SEA FILE=DGENE IYQEPPFKNL/SQSP
L8           16 SEA FILE=DGENE L7 AND SQL < 15
L9           16 SEA FILE=DGENE L8 NOT (US5662907/PN OR US6037135/PN)
L10           1 SEA FILE=DGENE L9 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)
L11           1 SEA FILE=DGENE L9 AND 19930101-19930806/PD,AD,PRD
L12           1 SEA FILE=DGENE L10 OR L11
L13           2 DUP REM L6 L12 (0 DUPLICATES REMOVED)


=> d 1-tot bib abs hitseq seq

L13  ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2002 ACS
AN   2000:172837  HCAPLUS
DN   132:221339
TI   Methods for making HLA binding peptides and their uses
IN   Kubo, Ralph T.; Grey, Howard M.; Sette, Alessandro; Celis, Esteban
PA   Epimmune Inc., USA
SO   U.S., 329 pp., Cont.-in-part of U.S. Ser. No. 103,396, abandoned.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 4
     PATENT NO.          KIND  DATE           APPLICATION NO.   DATE
     ----------          ----  --------       ---------------   --------
PI   US 6037135 50.40    A     20000314       US 1993-159339    19931129 <--
     US 5662907 50.40    A     19970902       US 1994-186266    19940125 <--
PRAI US 1992-926666             19920807  <--
     US 1993-27746              19930305  <--
     US 1993-103396             19930806  <--
     US 1993-159339             19931129
AB   Disclosed are methods for making peptides comprising an HLA-A24.1-, HLA-A1-,
     HLA-A11-, and HLA-A3.2-restricted T cell epitope consisting of about 8-11
     amino acid residues, and methods of making a peptide that binds to an HLA-
     A24.1, HLA-A1, HLA-A11, and HLA-A3.2 mol. at a dissocn. const. of less than
     500 nM.  Epitopes on a no. of potential target proteins (e.g. prostate
     specific antigen, hepatitis B core and surface antigens, hepatitis C antigen,
     malignant melanoma antigen MAGE-1, Epstein-Barr virus antigens, HIV-1 and
     papilloma virus antigen) are identified.  These HLA-binding peptides are
     useful for treating and diagnosing a no. of pathol. states such as viral
     infection and cancer.
IT   160950-50-5 245443-48-5
        (HLA binding epitopes of viral and tumor antigen for treatment and
```

diagnosis)
RN 160950-50-5 HCAPLUS
CN L-Lysine, L-glutaminyl-L-isoleucyl-L-tyrosyl-L-glutaminyl-L-α-glutamyl-L-prolyl-L-phenylalanyl-L-lysyl-L-asparaginyl-L-leucyl- (9CI) (CA INDEX NAME)

SEQ 1 QIYQEPFKNL K

Absolute stereochemistry.

RN 245443-48-5 HCAPLUS
CN L-Leucine, L-isoleucyl-L-tyrosyl-L-glutaminyl-L-α-glutamyl-L-prolyl-L-phenylalanyl-L-lysyl-L-asparaginyl- (9CI) (CA INDEX NAME)

SEQ 1 IYQEPFKNL

Absolute stereochemistry.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 2 DGENE COPYRIGHT 2002 DERWENT INFORMATION LTD
AN AAY38224 Peptide DGENE
TI Peptide which specifically binds selected MHC allele - used to induce an immune response for treatment or prevention of viral infection or cancer, or for diagnosis
IN Celis E; Grey H M; Kubo R T; Sette A
PA (CYTE-N) CYTEL CORP.
PI WO 9403205 A1 19940217 50.20pL 150p
AI **WO 1993-US7421 19930806**
PRAI **US 1993-27746 19930305**
US 1992-926666 19920807
DT Patent
LA English
OS 1994-065403 [08]
AN AAY38224 Peptide DGENE
AB The sequence is a specific example of a group of new immunogenic peptides having an HLA-A3.2, HLA-A1, HLA-A11 or HLA-A24.1 binding motif. For example, the peptides having an HLA-A3.2 binding motif each have 9-10 residues and contain, from the N-terminus to the C-terminus, (a) a first conserved residue selected from L, M, I, V, S, A, T, F, C, G, D and E and (b) a second conserved residue of K, R, Y, H or F, where the first and second conserved residues are separated by 6-7 residues. The peptides are capable of binding selected MHC molecules and inducing an immune response. They can be used to treat and/or prevent viral infection and cancer, e.g. prostate cancer, lymphoma, hepatitis or AIDS. They can also be used to produce antibodies for use as diagnostic or therapeutic agents. The peptides can also be used as diagnostic agents.

SEQ
1 iyqepfknl
==========
HITS AT: 1-9

=>

SEQ ID NO: 14463

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=> d a65843a07/a ; d query
NAME            CREATED      NOTES/TITLE
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A65843A07/A     06 FEB 2002  4 ANSWERS DUPLICATE REMOVE
                               (0 DUPLICATES REMOVED)
                             2 ANSWERS IN FILE HCAPLUS
                             2 ANSWERS IN FILE DGENE
                             HLA-A24 HIV POL 530


L1          290 SEA FILE=REGISTRY TYQIYQEPF/SQSP
L2            3 SEA FILE=REGISTRY L1 AND SQL < 15
L3            8 SEA FILE=HCAPLUS L2
L4            1 SEA FILE=HCAPLUS L3 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)

L5            2 SEA FILE=HCAPLUS L3 AND 19930101-19930806/PD,AD,PRD
L6            2 SEA FILE=HCAPLUS L4 OR L5
L7           68 SEA FILE=DGENE TYQIYQEPF/SQSP
L8            8 SEA FILE=DGENE L7 AND SQL < 15
L9            7 SEA FILE=DGENE L8 NOT (AU9474783/PN OR CA2168950/PN OR
                EP726941/PN OR US5662907/PN OR US5846827/PN OR US6037135/PN OR
                WO9504817/PN)
L10           2 SEA FILE=DGENE L9 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)
L11           2 SEA FILE=DGENE L9 AND 19930101-19930806/PD,AD,PRD
L12           2 SEA FILE=DGENE L10 OR L11
L13           4 DUP REM L6 L12 (0 DUPLICATES REMOVED)

=> d 1-tot bib abs hitseq seq

L13  ANSWER 1 OF 4  HCAPLUS  COPYRIGHT 2002 ACS
AN   2000:172837  HCAPLUS
DN   132:221339
TI   Methods for making HLA binding peptides and their uses
IN   Kubo, Ralph T.; Grey, Howard M.; Sette, Alessandro; Celis, Esteban
PA   Epimmune Inc., USA
SO   U.S., 329 pp., Cont.-in-part of U.S. Ser. No. 103,396, abandoned.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 4
     PATENT NO.          KIND  DATE          APPLICATION NO.   DATE
     ------------------  ----  --------      ---------------   --------
PI   US 6037135 $0.30    A     20000314      US 1993-159339    19931129 <--
     US 5662907 $0.40    A     19970902      US 1994-186266    19940125 <--
PRAI US 1992-926666              19920807 <--
     US 1993-27746               19930305 <--
     US 1993-103396              19930806 <--
     US 1993-159339              19931129
AB   Disclosed are methods for making peptides comprising an HLA-A24.1-, HLA-A1-,
     HLA-A11-, and HLA-A3.2-restricted T cell epitope consisting of about 8-11
     amino acid residues, and methods of making a peptide that binds to an HLA-
     A24.1, HLA-A1, HLA-A11, and HLA-A3.2 mol. at a dissocn. const. of less than
     500 nM. Epitopes on a no. of potential target proteins (e.g. prostate
     specific antigen, hepatitis B core and surface antigens, hepatitis C antigen,
     malignant melanoma antigen MAGE-1, Epstein-Barr virus antigens, HIV-1 and
     papilloma virus antigen) are identified. These HLA-binding peptides are
     useful for treating and diagnosing a no. of pathol. states such as viral
     infection and cancer.
```

IT **162886-81-9 245443-47-4**
(HLA binding epitopes of viral and tumor antigen for treatment and diagnosis)

RN 162886-81-9 HCAPLUS
CN L-Lysine, L-tryptophyl-L-threonyl-L-tyrosyl-L-glutaminyl-L-isoleucyl-L-tyrosyl-L-glutaminyl-L-α-glutamyl-L-prolyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

SEQ 1 WTYQIYQEPF K

Absolute stereochemistry.

RN 245443-47-4 HCAPLUS
CN L-Phenylalanine, L-threonyl-L-tyrosyl-L-glutaminyl-L-isoleucyl-L-tyrosyl-L-glutaminyl-L-α-glutamyl-L-prolyl- (9CI) (CA INDEX NAME)

SEQ 1 TYQIYQEPF

Absolute stereochemistry.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2002 ACS
AN 1995:538424 HCAPLUS
DN 122:288925
TI Methods for ex vivo therapy using peptide-loaded antigen-presenting cells for the activation of cytotoxic T lymphocytes
IN Celis, Esteban; Kubo, Ralph; Serra, Horacio; Tsai, Van; Wentworth, Peggy
PA Cytel Corp., USA
SO PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9504817	A1	19950216	WO 1994-US8672	19940801 <-- 12.00 pc
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN				
RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2168950	AA	19950216	CA 1994-2168950	19940801 <--
AU 9474783	A1	19950228	AU 1994-74783	19940801 <--
EP 726941	A1	19960821	EP 1994-924539	19940801 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
US 5846827	A	19981208	US 1995-468454	19950606 <-- 12.10 us
PRAI US 1993-103401		19930806	<-- 12.00 us	
WO 1994-US8672		19940801	12.00 pc	

AB Methods for activating cytotoxic T lymphocytes (CTL) in vitro are presented in conjunction with methods for using the activated CTL for therapy in vivo. Addnl., a method for killing specific CTL in vivo is presented using antigen-presenting cells which were modified in vitro. The method comprises (1) dissocg. bound peptides from class I MHC mols. on antigen-presenting cells using a mild acid treatment, (2) assocg. desired immunogenic peptides with the

class I MHC mols. on the antigen-presenting cells, and (3) incubating the antigen-presenting cells with the cytotoxic T cells in the presence of a growth factor, thereby producing activated cytotoxic T cells. The step of dissocg. bound peptides is carried out by incubating the antigen-presenting cells (e.g., SAC-I-activated peripheral blood mononuclear cells) in a glycine or citrate-phosphate buffer soln. at pH 3. Immunogenic peptides are assocd. with MHC mols. by incubation of the antigen-presenting cells with 10-50 μg/mL immunogenic peptide, followed by incubation of the cells with the cytotoxic T cells for about 7-10 days. The growth factors can be interleukin-7 added at day 0 and day 7, or interleukin-2 added after day 7. Of the immunogenic peptides tested to date, 12 of 60 MAGE peptides, 13 of 53 HIV peptides, 3 of 25 hepatitis C virus peptides, and 7 of 28 hepatitis B virus peptides induced primary CTL in vitro. The cytotoxic T cells are useful in the treatment of cancer, AIDS, hepatitis, bacterial infection, fungal infection, malaria, or tuberculosis.

IT **162886-81-9**
(methods for ex vivo therapy using peptide-loaded antigen-presenting cells for the activation of cytotoxic T lymphocytes)

RN 162886-81-9 HCAPLUS
CN L-Lysine, L-tryptophyl-L-threonyl-L-tyrosyl-L-glutaminyl-L-isoleucyl-L-tyrosyl-L-glutaminyl-L-α-glutamyl-L-prolyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

SEQ 1 WTYQIYQEPF K

Absolute stereochemistry.

L13 ANSWER 3 OF 4 DGENE COPYRIGHT 2002 DERWENT INFORMATION LTD
AN AAR49236 Protein DGENE
TI Peptide which specifically binds selected MHC allele - used to induce an immune response for treatment or prevention of viral infection or cancer, or for diagnosis
IN Celis E; Grey H M; Kubo R T; Sette A
PA (CYTE-N) CYTEL CORP.
PI WO 9403205 A 19940217 150p
AI **WO 1993-US7421 19930806** 50.10pc
PRAI **US 1992-926666 19920807**
US 1993-27746 19930305
DT Patent
LA English
OS 1994-065403 [08]
AN AAR49236 Protein DGENE
AB The sequences given in AAR47304-33 and AAR49201-44 are immunogenic peptides which have a HLA-A3.2, HLA-A1 or a HLA-A11 binding motif. These peptides may be used in the composition of the invention. These peptides are capable of binding selected MHC molecules and inducing an immune response. They can be used to treat and/or prevent viral infection and cancer, eg. prostate cancer, lymphoma, hepatitis or AIDS. They can also be used to produce antibodies for use as diagnostic or therapeutic agents. The peptides can also be used as diagnostic agents.

SEQ
1 wtyqiyqepf k
==========

HITS AT: 2-10

L13 ANSWER 4 OF 4 DGENE COPYRIGHT 2002 DERWENT INFORMATION LTD
AN AAY38223 Peptide DGENE

TI Peptide which specifically binds selected MHC allele - used to induce an immune response for treatment or prevention of viral infection or cancer, or for diagnosis

IN Celis E; Grey H M; Kubo R T; Sette A

PA (CYTE-N) CYTEL CORP.

PI WO 9403205 A1 19940217 150p

AI WO 1993-US7421 19930806 50.20 PC

PRAI US 1993-27746 19930305

US 1992-926666 19920807

DT Patent

LA English

OS 1994-065403 [08]

AN AAY38223 Peptide DGENE

AB The sequence is a specific example of a group of new immunogenic peptides having an HLA-A3.2, HLA-A1, HLA-A11 or HLA-A24.1 binding motif. For example, the peptides having an HLA-A3.2 binding motif each have 9-10 residues and contain, from the N-terminus to the C-terminus, (a) a first conserved residue selected from L, M, I, V, S, A, T, F, C, G, D and E and (b) a second conserved residue of K, R, Y, H or F, where the first and second conserved residues are separated by 6-7 residues. The peptides are capable of binding selected MHC molecules and inducing an immune response. They can be used to treat and/or prevent viral infection and cancer, e.g. prostate cancer, lymphoma, hepatitis or AIDS. They can also be used to produce antibodies for use as diagnostic or therapeutic agents. The peptides can also be used as diagnostic agents.

SEQ

1 tyqiyqepf

==========

HITS AT: 1-9

=>

SEQ ID NO: 14445

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=> d a65843a13/a ; d query
NAME                CREATED      NOTES/TITLE
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A65843A13/A         06 FEB 2002  4 ANSWERS DUPLICATE REMOVE
                                   (0 DUPLICATES REMOVED)
                                 3 ANSWERS IN FILE HCAPLUS
                                 1 ANSWER IN FILE DGENE
                                 HLA-A3  HIV ENV 47

L1   (        483)SEA FILE=REGISTRY VTVYYGVPVWK/SQSP
L2   (          2)SEA FILE=REGISTRY L1 AND SQL < 15
L3   (         11)SEA FILE=HCAPLUS L2
L4   (          2)SEA FILE=HCAPLUS L3 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)

L5   (          3)SEA FILE=HCAPLUS L3 AND 19930101-19930806/PD,AD,PRD
L6   (          3)SEA FILE=HCAPLUS L4 OR L5
L7   (        158)SEA FILE=DGENE VTVYYGVPVWK/SQSP
L8   (          5)SEA FILE=DGENE L7 AND SQL < 15
L9   (          4)SEA FILE=DGENE L8 NOT (EP283327/PN OR EP750041/PN OR FR2610632/
                  PN OR FR2614025/PN OR AT154808/PN OR AU608294/PN OR AU8812250/P
                  N OR AU9474783/PN OR CA2168950/PN OR DK8805133/PN OR EP726941/P
                  N OR ES2104556/PN OR JP01502119/PN OR JP07300498/PN OR
                  JP11322792/PN OR JP2002030099/PN OR "JP2862810 B2"/PN OR
                  "JP2948823 B2"/PN OR US5051496/PN OR US5079342/PN OR US5662907/
                  PN OR US5846827/PN OR US6037135/PN OR US6054565/PN OR US6261762
                  /PN OR US6322964/PN OR WO8805440/PN OR WO9504817/PN OR
                  ZA8800310/PN)
L10  (          1)SEA FILE=DGENE L9 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)
L11  (          1)SEA FILE=DGENE L9 AND 19930101-19930806/PD,AD,PRD
L12  (          1)SEA FILE=DGENE L10 OR L11
L13             4 DUP REM L6 L12 (0 DUPLICATES REMOVED)

=> d 1-tot bib abs hitseq seq

L13  ANSWER 1 OF 4  HCAPLUS  COPYRIGHT 2002 ACS
AN   2000:172837  HCAPLUS
DN   132:221339
TI   Methods for making HLA binding peptides and their uses
IN   Kubo, Ralph T.; Grey, Howard M.; Sette, Alessandro; Celis, Esteban
PA   Epimmune Inc., USA
SO   U.S., 329 pp., Cont.-in-part of U.S. Ser. No. 103,396, abandoned.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 4
     PATENT NO.          KIND  DATE          APPLICATION NO.   DATE
     ----------          ----  --------      ---------------   --------
PI   US 6037135          A     20000314      US 1993-159339    19931129 <--
     US 5662907          A     19970902      US 1994-186266    19940125 <--
PRAI US 1992-926666            19920807  <--
     US 1993-27746             19930305  <--
     US 1993-103396            19930806  <--
     US 1993-159339            19931129
AB   Disclosed are methods for making peptides comprising an HLA-A24.1-, HLA-A1-,
     HLA-A11-, and HLA-A3.2-restricted T cell epitope consisting of about 8-11
     amino acid residues, and methods of making a peptide that binds to an HLA-
     A24.1, HLA-A1, HLA-A11, and HLA-A3.2 mol. at a dissocn. const. of less than
```

500 nM. Epitopes on a no. of potential target proteins (e.g. prostate specific antigen, hepatitis B core and surface antigens, hepatitis C antigen, malignant melanoma antigen MAGE-1, Epstein-Barr virus antigens, HIV-1 and papilloma virus antigen) are identified. These HLA-binding peptides are useful for treating and diagnosing a no. of pathol. states such as viral infection and cancer.

IT 162886-82-0
(HLA binding epitopes of viral and tumor antigen for treatment and diagnosis)

RN 162886-82-0 HCAPLUS
CN L-Lysine, L-valyl-L-threonyl-L-valyl-L-tyrosyl-L-tyrosylglycyl-L-valyl-L-prolyl-L-valyl-L-tryptophyl- (9CI) (CA INDEX NAME)

SEQ 1 VTVYYGVPVW K

Absolute stereochemistry.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2002 ACS
AN 1995:538424 HCAPLUS
DN 122:288925
TI Methods for ex vivo therapy using peptide-loaded antigen-presenting cells for the activation of cytotoxic T lymphocytes
IN Celis, Esteban; Kubo, Ralph; Serra, Horacio; Tsai, Van; Wentworth, Peggy
PA Cytel Corp., USA
SO PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9504817	A1	19950216	WO 1994-US8672	19940801 <--
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN				
RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2168950	AA	19950216	CA 1994-2168950	19940801 <--
AU 9474783	A1	19950228	AU 1994-74783	19940801 <--
EP 726941	A1	19960821	EP 1994-924539	19940801 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
US 5846827	A	19981208	US 1995-468454	19950606 <--
PRAI US 1993-103401		19930806 <--		
WO 1994-US8672		19940801		

AB Methods for activating cytotoxic T lymphocytes (CTL) in vitro are presented in conjunction with methods for using the activated CTL for therapy in vivo. Addnl., a method for killing specific CTL in vivo is presented using antigen-presenting cells which were modified in vitro. The method comprises (1) dissocg. bound peptides from class I MHC mols. on antigen-presenting cells using a mild acid treatment, (2) assocg. desired immunogenic peptides with the class I MHC mols. on the antigen-presenting cells, and (3) incubating the antigen-presenting cells with the cytotoxic T cells in the presence of a growth factor, thereby producing activated cytotoxic T cells. The step of dissocg. bound peptides is carried out by incubating the antigen-presenting cells (e.g., SAC-I-activated peripheral blood mononuclear cells) in a glycine

or citrate-phosphate buffer soln. at pH 3. Immunogenic peptides are assocd. with MHC mols. by incubation of the antigen-presenting cells with 10-50 μg/mL immunogenic peptide, followed by incubation of the cells with the cytotoxic T cells for about 7-10 days. The growth factors can be interleukin-7 added at day 0 and day 7, or interleukin-2 added after day 7. Of the immunogenic peptides tested to date, 12 of 60 MAGE peptides, 13 of 53 HIV peptides, 3 of 25 hepatitis C virus peptides, and 7 of 28 hepatitis B virus peptides induced primary CTL in vitro. The cytotoxic T cells are useful in the treatment of cancer, AIDS, hepatitis, bacterial infection, fungal infection, malaria, or tuberculosis.

IT **162886-82-0**
(methods for ex vivo therapy using peptide-loaded antigen-presenting cells for the activation of cytotoxic T lymphocytes)

RN 162886-82-0 HCAPLUS
CN L-Lysine, L-valyl-L-threonyl-L-valyl-L-tyrosyl-L-tyrosylglycyl-L-valyl-L-prolyl-L-valyl-L-tryptophyl- (9CI) (CA INDEX NAME)

SEQ 1 VTVYYGVPVW K

Absolute stereochemistry.

L13 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2002 ACS
AN 1989:402164 HCAPLUS
DN 111:2164
TI Peptides having immunological properties of HIV-2 (human immunodeficiency virus) for diagnosis and vaccines and simian immunodeficiency virus genome cDNA sequence
IN Alizon, Marc; Montagnier, Luc; Guetard, Denise; Clavel, Francois; Sonigo, Pierre; Guyader, Mireille; Tiollais, Pierre; Chakrabarti, Lisa; Desrosiers, Ronald
PA Institut Pasteur, Fr.
SO PCT Int. Appl., 96 pp.
CODEN: PIXXD2
DT Patent
LA French
FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 8805440	A1	19880728	WO 1988-FR25	19880115 <--
	W: AU, DK, JP, KR, US				
	US 5051496	A	19910924	US 1987-3764	19870116 <--
	FR 2610632	A1	19880812	FR 1987-1739	19870211 <--
	FR 2610632	B1	19901221		
	US 5079342	A	19920107	US 1987-13477	19870211 <--
	FR 2614025	A1	19881021	FR 1987-5398	19870415 <--
	FR 2614025	B1	19900518		
	AU 8812250	A1	19880810	AU 1988-12250	19880115 <--
	AU 608294	B2	19910328		
	EP 283327	A2	19880921	EP 1988-400084	19880115 <--
	EP 283327	A3	19890104		
	EP 283327	B1	19970625		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 01502119	T2	19890727	JP 1988-501472	19880115 <--
	JP 2948823	B2	19990913		
	EP 750041	A2	19961227	EP 1996-108720	19880115 <--
	EP 750041	A3	19970122		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				

	AT 154808	E	19970715	AT 1988-400084	19880115	<--
	ES 2104556	T3	19971016	ES 1988-400084	19880115	<--
	JP 11322792	A2	19991124	JP 1999-99449	19880115	<--
	JP 2002030099	A2	20020129	JP 2001-133477	19880115	<--
	ZA 8800310	A	19880928	ZA 1988-310	19880118	<--
	DK 8805133	A	19881116	DK 1988-5133	19880915	<--
	US 6054565	A	20000425	US 1994-234875	19940428	<--
	US 6322964	B1	20011127	US 1994-268388	19940630	<--
	JP 07300498	A2	19951114	JP 1995-117839	19950419	<--
	JP 2862810	B2	19990303			
	US 6261762	B1	20010717	US 1997-774736	19970102	<--
PRAI	US 1987-3764	A	19870116	<--		
	FR 1987-1739	A	19870211	<--		
	US 1987-13477	A2	19870211	<--		
	FR 1987-5398	A	19870415	<--		
	FR 1986-910	A	19860122	<--		
	FR 1986-911	A	19860122	<--		
	FR 1986-1635	A	19860206	<--		
	FR 1986-1985	A	19860213	<--		
	US 1986-835228	A2	19860303	<--		
	US 1986-916080	B2	19861006	<--		
	US 1986-931866	A2	19861121	<--		
	US 1986-933184	B2	19861121	<--		
	US 1987-30403	B2	19870325	<--		
	US 1987-35408	B1	19870407	<--		
	EP 1988-400084	A3	19880115	<--		
	JP 1988-501472	A3	19880115	<--		
	JP 1999-99449	A3	19880115	<--		
	WO 1988-FR25	A	19880115	<--		
	US 1990-622299	B1	19901205	<--		
	US 1991-752368	B3	19910903	<--		
	US 1991-807426	B1	19911213	<--		
	US 1991-810908	A3	19911220	<--		
	US 1993-37506	B1	19930324	<--		

AB Peptides having immunol. properties in common with HIV-2, particularly the envelope glycoprotein of HIV-21, and with the glycoprotein of SIV-1 (simian immunodeficiency virus) are useful in detecting infection with HIV-2 and in vaccines. Diagnostic kits and cDNA sequences esp. for SIV-1 macaque are also included. The DNA of HUT 78 cells infected with SIV-1 of macaque was partially digested with restriction endonuclease Sau 345 and cloned in the BamHI of λ to construct a gene bank. The recombinant phages were screened using sequences of HIV-2. One clone, λSIV-1, had a 16.5-kilobase insert comprising the entire provirus genome lacking only 250 bases at the left long terminal repeat region. The nucleotide sequence was detd. by the dideoxynucleotide method after subcloning in phage M13mp8.

IT **120915-77-7**
(peptide with homol. to human and simian immunodeficiency viruses for diagnosis and vaccines)

RN 120915-77-7 HCAPLUS

CN L-Threonine, L-valyl-L-threonyl-L-valyl-L-tyrosyl-L-tyrosylglycyl-L-valyl-L-prolyl-L-valyl-L-tryptophyl-L-lysyl-L-α-glutamyl-L-alanyl- (9CI) (CA INDEX NAME)

SEQ 1 VTVYYGVPVW KEAT

Absolute stereochemistry.

L13 ANSWER 4 OF 4 DGENE COPYRIGHT 2002 DERWENT INFORMATION LTD
AN AAR49239 Protein DGENE
TI Peptide which specifically binds selected MHC allele - used to induce an immune response for treatment or prevention of viral infection or cancer, or for diagnosis
IN Celis E; Grey H M; Kubo R T; Sette A
PA (CYTE-N) CYTEL CORP.
PI WO 9403205 A 19940217 150p
AI **WO 1993-US7421 19930806**
PRAI **US 1992-926666 19920807**
US 1993-27746 19930305

DT Patent
LA English
OS 1994-065403 [08]
AN AAR49239 Protein DGENE
AB The sequences given in AAR47304-33 and AAR49201-44 are immunogenic peptides which have a HLA-A3.2, HLA-A1 or a HLA-A11 binding motif. These peptides may be used in the composition of the invention. These peptides are capable of binding selected MHC molecules and inducing an immune response. They can be used to treat and/or prevent viral infection and cancer, eg. prostate cancer, lymphoma, hepatitis or AIDS. They can also be used to produce antibodies for use as diagnostic or therapeutic agents. The peptides can also be used as diagnostic agents.

SEQ
1 vtvyygvpvw k

=>

SEQ ID NO: 14438

```
=> d a65843a14/a ;d query
NAME                CREATED       NOTES/TITLE
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A65843A14/A         06 FEB 2002   2 ANSWERS DUPLICATE REMOVE
                                     (0 DUPLICATES REMOVED)
                                  1 ANSWER IN FILE HCAPLUS
                                  1 ANSWER IN FILE DGENE
                                  HLA-A3  HIV POL 929


L1          239 SEA FILE=REGISTRY QMAVFIHNFK/SQSP
L2            2 SEA FILE=REGISTRY L1 AND SQL < 15
L3            7 SEA FILE=HCAPLUS L2
L4            1 SEA FILE=HCAPLUS L3 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)

L5            1 SEA FILE=HCAPLUS L3 AND 19930101-19930806/PD,AD,PRD
L6            1 SEA FILE=HCAPLUS L4 OR L5
L7           72 SEA FILE=DGENE QMAVFIHNFK/SQSP
L8            4 SEA FILE=DGENE L7 AND SQL < 15
L9            4 SEA FILE=DGENE L8 NOT (US5662907/PN OR US6037135/PN)
L10           1 SEA FILE=DGENE L9 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)
L11           1 SEA FILE=DGENE L9 AND 19930101-19930806/PD,AD,PRD
L12           1 SEA FILE=DGENE L10 OR L11
L13           2 DUP REM L6 L12 (0 DUPLICATES REMOVED)


=> d 1-tot bib abs hitseq seq

L13  ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2002 ACS
AN   2000:172837  HCAPLUS
DN   132:221339
TI   Methods for making HLA binding peptides and their uses
IN   Kubo, Ralph T.; Grey, Howard M.; Sette, Alessandro; Celis, Esteban
PA   Epimmune Inc., USA
SO   U.S., 329 pp., Cont.-in-part of U.S. Ser. No. 103,396, abandoned.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 4
     PATENT NO.          KIND  DATE              APPLICATION NO.   DATE
     ---------------     ----  --------          ---------------   --------
PI   US 6037135          A     20000314          US 1993-159339    19931129 <--
     US 5662907          A     19970902          US 1994-186266    19940125 <--
PRAI US 1992-926666            19920807  <--
     US 1993-27746             19930305  <--
     US 1993-103396            19930806  <--
     US 1993-159339            19931129
AB   Disclosed are methods for making peptides comprising an HLA-A24.1-, HLA-A1-,
     HLA-A11-, and HLA-A3.2-restricted T cell epitope consisting of about 8-11
     amino acid residues, and methods of making a peptide that binds to an HLA-
     A24.1, HLA-A1, HLA-A11, and HLA-A3.2 mol. at a dissocn. const. of less than
     500 nM.  Epitopes on a no. of potential target proteins (e.g. prostate
     specific antigen, hepatitis B core and surface antigens, hepatitis C antigen,
     malignant melanoma antigen MAGE-1, Epstein-Barr virus antigens, HIV-1 and
     papilloma virus antigen) are identified.  These HLA-binding peptides are
     useful for treating and diagnosing a no. of pathol. states such as viral
     infection and cancer.
IT   199727-50-9
        (HLA binding epitopes of viral and tumor antigen for treatment and
```

diagnosis)
RN 199727-50-9 HCAPLUS
CN L-Lysine, L-glutaminyl-L-methionyl-L-alanyl-L-valyl-L-phenylalanyl-L-isoleucyl-L-histidyl-L-asparaginyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

SEQ 1 QMAVFIHNFK

Absolute stereochemistry.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 2 DGENE COPYRIGHT 2002 DERWENT INFORMATION LTD
AN AAY38221 Peptide DGENE
TI Peptide which specifically binds selected MHC allele - used to induce an immune response for treatment or prevention of viral infection or cancer, or for diagnosis
IN Celis E; Grey H M; Kubo R T; Sette A
PA (CYTE-N) CYTEL CORP.
PI WO 9403205 A1 19940217 50.20pv 150p
AI **WO 1993-US7421 19930806**
PRAI **US 1993-27746 19930305**
US 1992-926666 19920807
DT Patent
LA English
OS 1994-065403 [08]
AN AAY38221 Peptide DGENE
AB The sequence is a specific example of a group of new immunogenic peptides having an HLA-A3.2, HLA-A1, HLA-A11 or HLA-A24.1 binding motif. For example, the peptides having an HLA-A3.2 binding motif each have 9-10 residues and contain, from the N-terminus to the C-terminus, (a) a first conserved residue selected from L, M, I, V, S, A, T, F, C, G, D and E and (b) a second conserved residue of K, R, Y, H or F, where the first and second conserved residues are separated by 6-7 residues. The peptides are capable of binding selected MHC molecules and inducing an immune response. They can be used to treat and/or prevent viral infection and cancer, e.g. prostate cancer, lymphoma, hepatitis or AIDS. They can also be used to produce antibodies for use as diagnostic or therapeutic agents. The peptides can also be used as diagnostic agents.

SEQ
1 qmavfihnfk
==========
HITS AT: 1-10

=>

SEQ ID NO: 144446

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=> d a65843a15/a ;d query
NAME            CREATED      NOTES/TITLE
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A65843A15/A     06 FEB 2002  8 ANSWERS DUPLICATE REMOVE
                               (0 DUPLICATES REMOVED)
                             7 ANSWERS IN FILE HCAPLUS
                             1 ANSWER IN FILE DGENE
                             HLA-A3  HIV NEF 100


L1          711 SEA FILE=REGISTRY QVPLRPMTYK/SQSP
L2            3 SEA FILE=REGISTRY L1 AND SQL < 15
L3           34 SEA FILE=HCAPLUS L2
L4            5 SEA FILE=HCAPLUS L3 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)

L5            4 SEA FILE=HCAPLUS L3 AND 19930101-19931129/PD,AD,PRD
L6            7 SEA FILE=HCAPLUS L4 OR L5
L7           97 SEA FILE=DGENE QVPLRPMTYK/SQSP
L8           34 SEA FILE=DGENE L7 AND SQL < 15
L9           31 SEA FILE=DGENE L8 NOT (US5989565/PN OR US6077519/PN OR
                AU9674656/PN OR CA2025634/PN OR CA2235168/PN OR EP491844/PN OR
                EP868196/PN OR JP05502442/PN OR JP11515006/PN OR US5013548/PN
                OR US5019387/PN OR US5352576/PN OR US5662907/PN OR US5993819/PN
                 OR US6037135/PN OR WO9104051/PN OR WO9714436/PN)
L10           0 SEA FILE=DGENE L9 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)
L11           1 SEA FILE=DGENE L9 AND 19930101-19931129/PD,AD,PRD
L12           1 SEA FILE=DGENE L10 OR L11
L13           8 DUP REM L6 L12 (0 DUPLICATES REMOVED)


=> d 1-tot bib abs hitseq seq

L13  ANSWER 1 OF 8  HCAPLUS  COPYRIGHT 2002 ACS
AN   2000:416618  HCAPLUS
DN   133:57568
TI   Methods for isolation and use of T cell epitopes eluted from viable cells
     in vaccines for treating cancer patients
IN   Storkus, Walter J.; Lotze, Michael T.
PA   University of Pittsburgh, USA
SO   U.S., 65 pp., Cont.-in-part of U. S. Ser. No. 474,120.
     CODEN: USXXAM
DT   Patent
LA   English .
FAN.CNT 2
     PATENT NO.          KIND  DATE          APPLICATION NO.  DATE
     ----------          ----  --------      ---------------  --------
PI   US 6077519          A     20000620      US 1997-785831   19970115 <--
     US 5989565          A     19991123      US 1995-474120   19950607 <--
PRAI US 1993-11007       B2    19930129  <--
     US 1995-474120      A2    19950607
AB   Methods are provided for eluting peptides that are bound to major
     histocompatibility complex ("MHC") mols. expressed on the cell surfaces of
     viable cells that have at least one MHC-peptide complex on the surfaces of the
     cells.  Methods are provided for using such acid-eluted T cell epitopes,
     preferably obtained from a patient's tumor, and autologous dendritic cells as
     the basis for antitumor vaccines.
IT   129633-71-2
       (unclaimed sequence; methods for isolation and use of T cell epitopes
       eluted from viable cells in vaccines for treating cancer patients)
```

RN 129633-71-2 HCAPLUS
CN L-Lysine, L-glutaminyl-L-valyl-L-prolyl-L-leucyl-L-arginyl-L-prolyl-L-methionyl-L-threonyl-L-tyrosyl- (9CI) (CA INDEX NAME)

SEQ 1 QVPLRPMTYK

Absolute stereochemistry.

RE.CNT 76 THERE ARE 76 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2002 ACS
AN 2000:172837 HCAPLUS
DN 132:221339
TI Methods for making HLA binding peptides and their uses
IN Kubo, Ralph T.; Grey, Howard M.; Sette, Alessandro; Celis, Esteban
PA Epimmune Inc., USA
SO U.S., 329 pp., Cont.-in-part of U.S. Ser. No. 103,396, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6037135	A	20000314	US 1993-159339	19931129 <--
	US 5662907	A	19970902	US 1994-186266	19940125 <--
PRAI	US 1992-926666		19920807 <--		
	US 1993-27746		19930305 <--		
	US 1993-103396		19930806 <--		
	US 1993-159339		19931129 <--		

AB Disclosed are methods for making peptides comprising an HLA-A24.1-, HLA-A1-, HLA-A11-, and HLA-A3.2-restricted T cell epitope consisting of about 8-11 amino acid residues, and methods of making a peptide that binds to an HLA-A24.1, HLA-A1, HLA-A11, and HLA-A3.2 mol. at a dissocn. const. of less than 500 nM. Epitopes on a no. of potential target proteins (e.g. prostate specific antigen, hepatitis B core and surface antigens, hepatitis C antigen, malignant melanoma antigen MAGE-1, Epstein-Barr virus antigens, HIV-1 and papilloma virus antigen) are identified. These HLA-binding peptides are useful for treating and diagnosing a no. of pathol. states such as viral infection and cancer.

IT **129633-71-2**
(HLA binding epitopes of viral and tumor antigen for treatment and diagnosis)

RN 129633-71-2 HCAPLUS
CN L-Lysine, L-glutaminyl-L-valyl-L-prolyl-L-leucyl-L-arginyl-L-prolyl-L-methionyl-L-threonyl-L-tyrosyl- (9CI) (CA INDEX NAME)

SEQ 1 QVPLRPMTYK

Absolute stereochemistry.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2002 ACS
AN 1999:748174 HCAPLUS

DN 132:2780
TI Elution and identification of T cell epitopes from viable cells
IN Storkus, Walter J.; Lotze, Michael T.
PA University of Pittsburgh, USA
SO U.S., 39 pp., Cont.-in-part of U.S. Ser. No. 11,007, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5989565	A	19991123	US 1995-474120	19950607 <--
	US 6077519	A	20000620	US 1997-785831	19970115 <--
PRAI	US 1993-11007	B2	19930129 <--		
	US 1995-474120	A2	19950607		

AB The authors disclose a method for eluting peptides that are bound to MHC mols. expressed on the cell surfaces of viable cells. The method comprises incubating the cells in the presence of peptide elution buffer, preferably citrate-phosphate buffer at a pH of approx. 3.3, for between about 15 s and one minute. Using these methods a naturally processed melanoma peptide recognized by CD8+ cytotoxic T lymphocytes was identified.

IT **129633-71-2**
(unclaimed sequence; elution and identification of T cell epitopes from viable cells)

RN 129633-71-2 HCAPLUS
CN L-Lysine, L-glutaminyl-L-valyl-L-prolyl-L-leucyl-L-arginyl-L-prolyl-L-methionyl-L-threonyl-L-tyrosyl- (9CI) (CA INDEX NAME)

SEQ 1 QVPLRPMTYK

Absolute stereochemistry.

RE.CNT 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2002 ACS
AN 1997:403069 HCAPLUS
DN 127:16486
TI Synthetic vaccine for protection against human immunodeficiency virus infection
IN Haynes, Barton F.; Palker, Thomas J.
PA Duke University, USA
SO PCT Int. Appl., 100 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9714436	A1	19970424	WO 1996-US16911	19961018
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5019387	A	19910528	US 1987-93854	19870908 <--
	US 5013548	A	19910507	US 1988-146720	19880121 <--
	US 5352576	A	19941004	US 1992-931416	19920824 <--
	US 5993819	A	19991130	US 1995-546515	19951020 <--
	CA 2235168	AA	19970424	CA 1996-2235168	19961018
	AU 9674656	A1	19970507	AU 1996-74656	19961018

EP 868196	A1	19981007	EP 1996-936830	19961018
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 11515006	T2	19991221	JP 1996-516093	19961018
PRAI US 1995-546515		19951020		
US 1996-599266		19960209		
US 1987-93854		19870908	<--	
US 1990-589591		19900928	<--	
US 1990-591109		19901001	<--	
US 1992-832849		19920210	<--	
US 1992-858361		19920327	<--	
US 1994-235305		19940429		
WO 1996-US16911		19961018		

AB The present invention relates to immunogenic prepns. of peptides comprising amino acid sequences corresponding to antigenic determinants of the envelope glycoprotein of HIV, covalently coupled, directly or through a spacer mol., to carrier mols. suitable for vaccination of mammals.

IT **129633-71-2**
(synthetic HIV envelope glycoprotein conjugates as vaccine for protection against human immunodeficiency virus infection or AIDS)

RN 129633-71-2 HCAPLUS

CN L-Lysine, L-glutaminyl-L-valyl-L-prolyl-L-leucyl-L-arginyl-L-prolyl-L-methionyl-L-threonyl-L-tyrosyl- (9CI) (CA INDEX NAME)

SEQ 1 QVPLRPMTYK

Absolute stereochemistry.

L13 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2002 ACS

AN 1993:57630 HCAPLUS

DN 118:57630

TI Peptide-induced modulation of target cell sensitivity to natural killing

AU Storkus, Walter J.; Salter, Russell D.; Cresswell, Peter; Dawson, Jeffrey R.

CS Sch. Med., Univ. Pittsburgh, Pittsburgh, PA, 15261, USA

SO J. Immunol. (**1992**), 149(4), 1185-90
CODEN: JOIMA3; ISSN: 0022-1767

DT Journal

LA English

AB It was previously shown that the capacity of class I mols. to confer resistance to natural killing (NK) in transfected target cells maps to the antigen (Ag)-binding site (ABS) of the HLA class I structure. Here the effect of peptide (reagents specific for the ABS) pretreatment on the NK sensitivity of class I+ target cells was examd. Synthetic peptides (10-17 amino acids in length) were used to pretreat C1R target cells expressing either no serol. detectable HLA-A, B class I mols., or C1R transfectants expressing individual HLA-A or -B locus class I mols. In each case in which the class I allele had previously been shown to directly bind a given peptide, peptide-pulsing of target cells resulted in increased sensitivity to NK-mediated conjugation and cytolysis. The NK susceptibility of C1R target cells expressing no HLA-A, B class I mols. or the nonprotective HLA-A2.1 or HLA-A2M70 mutant class I mols. was unaffected by pretreatment with HLA-A2-binding peptides. These results support the intimate involvement of the HLA class I ABS and potentially ABS-bound peptides in detg. target cell sensitivity to NK.

IT **129633-71-2**
(target cell sensitivity to natural killer cell conjugation and cytolysis modulation by)

RN 129633-71-2 HCAPLUS
CN L-Lysine, L-glutaminyl-L-valyl-L-prolyl-L-leucyl-L-arginyl-L-prolyl-L-methionyl-L-threonyl-L-tyrosyl- (9CI) (CA INDEX NAME)

SEQ 1 QVPLRPMTYK

Absolute stereochemistry.

L13 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2002 ACS
AN 1991:581362 HCAPLUS
DN 115:181362
TI Peptides including cytotoxic T-lymphocyte (CTL)-stimulating epitopes of human immunodeficiency virus (HIV) proteins and use thereof
IN Fuerst, Thomas; Koenig, Scott
PA Medimmune, Inc., USA; United States Dept. of Health and Human Services
SO PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9104051	A1	19910404	WO 1990-US5343	19900919 <--
	W: JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
	CA 2025634	AA	19910320	CA 1990-2025634	19900918 <--
	EP 491844	A1	19920701	EP 1990-914632	19900919 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE				
	JP 05502442	T2	19930428	JP 1990-513793	19900919 <--
PRAI	US 1989-409596		19890919 <--		
	WO 1990-US5343		19900919 <--		

OS MARPAT 115:181362
AB Peptide fragments of HIV nef, gag, and env proteins, which include a CTL epitope are used to induce or augment a CTL response to HIV for diagnosis or treatment of HIV infection. The nef gene was excised and placed into a vaccinia virus integration vector to make thymidine kinase-recombinant vaccinia virus vTFnef. VTFnef was used to screen circulating T-lymphocytes for CTL activity directed to nef protein from HIV-1 seropos. patients. A nef-specific CTL epitope was mapped to amino acid residues 73-82.
IT **129633-71-2**
(peptide of nef protein of AIDS virus, cytotoxic T-lymphocyte response induction by)
RN 129633-71-2 HCAPLUS
CN L-Lysine, L-glutaminyl-L-valyl-L-prolyl-L-leucyl-L-arginyl-L-prolyl-L-methionyl-L-threonyl-L-tyrosyl- (9CI) (CA INDEX NAME)

SEQ 1 QVPLRPMTYK

Absolute stereochemistry.

L13 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2002 ACS
AN 1990:550532 HCAPLUS
DN 113:150532
TI Mapping the fine specificity of a cytolytic T cell response to HIV-1 nef

protein
AU Koenig, Scott; Fuerst, Thomas R.; Wood, Lauren V.; Woods, Robert M.; Suzich, Joann A.; Jones, Gary M.; De la Cruz, Vidal F.; Davey, Richard T., Jr.; Venkatesan, Sundararagan; et al.
CS Lab. Immunoregul., Natl. Inst. Allergy Infect. Dis., Bethesda, MD, 20892, USA
SO J. Immunol. (1990), 145(1), 127-35
CODEN: JOIMA3; ISSN: 0022-1767
DT Journal
LA English
AB Epitope mapping of a MHC class I-restricted cytotoxic T cell response to nef, a regulatory protein of HIV, was performed with fresh PBMC from HIV-seropos. donors and target cells pulsed with a panel of overlapping peptides of the nef protein. These nef-specific CTL recognized a synthetic peptide of 10 residues derived from a nonamphipathic, highly conserved region of the nef protein in assocn. with the HLA A3.1 mol. Using human cell transfectants expressing mutations of the A3 mol., it was demonstrated that the amino acid at position 152 of the A3.1 mol. appears to be crit. for detection of this response. Thus, rapid anal. of the epitopes of HIV proteins stimulating CTL responses can be achieved using a combination of fresh donor PBMC and target cells pulsed with synthesized peptides.
IT **129633-71-2**
(of nef protein, of human immunodeficiency virus, cytolytic T-cell response to)
RN 129633-71-2 HCAPLUS
CN L-Lysine, L-glutaminyl-L-valyl-L-prolyl-L-leucyl-L-arginyl-L-prolyl-L-methionyl-L-threonyl-L-tyrosyl- (9CI) (CA INDEX NAME)

SEQ 1 QVPLRPMTYK

Absolute stereochemistry.

L13 ANSWER 8 OF 8 DGENE COPYRIGHT 2002 DERWENT INFORMATION LTD
AN AAR68745 peptide DGENE
TI Implant for sustained release of pathogen-associated antigen - forming chronic inflammatory site producing cytotoxic T-lymphocytes lysing infected cells, esp. for treating AIDS
IN Leonard R J
PA (ENDO-N) ENDOCON INC.
PI WO 9428871 A 19941222 35p
AI WO 1994-US6394 19940607
PRAI **US 1993-72718** 19930607
DT Patent
LA English
OS 1995-036067 [05]
AN AAR68745 peptide DGENE
AB AAR68744-805 are cytotoxic T lymphocyte (CTL) class I and II restricted epitopes derived from human immunodeficiency virus proteins. AAR68745 corresponds to amino acid residues 73-82 of the nef protein. These antigens are examples of peptides that can be used with an immunogenic implant. The implant is associated with an antigen associated with a pathogen and used to form a discrete, localised chronic inflammation site which acts as a local 'factory' for prodn. of CTL's which lyse cells infected with a specific pathogen. The expanded set of pathogen-specific CTL's can eradicate or prevent development of infection, and can also be used to treat or arrest the development of cancers associated with infection.

SEQ

1 qvplrpmtyk
****
HITS AT: 1-10

=>

SEQ ID NO:14432

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=> d a65843a16/a ;d query
NAME            CREATED      NOTES/TITLE
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A65843A16/A     06 FEB 2002  2 ANSWERS DUPLICATE REMOVE
                               (0 DUPLICATES REMOVED)
                             2 ANSWERS IN FILE HCAPLUS
                             HLA-A2  HIV ENV 134


L1          573 SEA FILE=REGISTRY KLTPLCVTL/SQSP
L2            6 SEA FILE=REGISTRY L1 AND SQL < 15
L3           17 SEA FILE=HCAPLUS L2
L4            2 SEA FILE=HCAPLUS L3 AND (AY < 1994 OR PRY < 1994 OR PY < 1994)

L5            2 SEA FILE=HCAPLUS L3 AND 19940101-19940304/PD,AD,PRD
L6            2 SEA FILE=HCAPLUS L4 OR L5
L7          142 SEA FILE=DGENE KLTPLCVTL/SQSP
L8           13 SEA FILE=DGENE L7 AND SQL < 15
L9           11 SEA FILE=DGENE L8 NOT (AU681591/PN OR AU9463594/PN OR AU9865979
                /PN OR BR9406652/PN OR CA2157510/PN OR CN1118572/PN OR
                EP654080/PN OR EP703783/PN OR JP07509237/PN OR JP08507525/PN
                OR WO9402614/PN OR WO9420127/PN OR ZA9305165/PN)
L10           0 SEA FILE=DGENE L9 AND (AY < 1994 OR PRY < 1994 OR PY < 1994)
L11           0 SEA FILE=DGENE L9 AND 19940101-19940304/PD,AD,PRD
L12           0 SEA FILE=DGENE L10 OR L11
L13           2 DUP REM L6 L12 (0 DUPLICATES REMOVED)


=> d 1-tot bib abs hitseq

L13  ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2002 ACS
AN   1995:294003  HCAPLUS
DN   122:263516
TI   HLA-A2.1 binding peptides and their detection and uses
IN   Grey, Howard M.; Sette, Alessandro; Sidney, John; Kast, W. Martin
PA   Cytel Corp., USA
SO   PCT Int. Appl., 138 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND  DATE          APPLICATION NO.   DATE
     ----------------    ----  --------      ----------------  --------
PI   WO 9420127          A1    19940915      WO 1994-US2353    19940304 <-- 58,30Pc
        W:  AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU,
            JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO,
            RU, SD, SE, SI, SK, UA, UZ, VN
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
            BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
     CA 2157510          AA    19940915      CA 1994-2157510   19940304 <--
     AU 9463594          A1    19940926      AU 1994-63594     19940304 <--
     CN 1118572          A     19960313      CN 1994-191364    19940304 <--
     EP 703783           A1    19960403      EP 1994-910837    19940304 <--
        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
     JP 08507525         T2    19960813      JP 1994-520190    19940304 <--
     BR 9406652          A     19960910      BR 1994-6652      19940304 <--
     AU 9865979          A1    19980702      AU 1998-65979     19980518 <--
PRAI US 1993-27146 58.00 19930305 <--
     US 1993-73205 58.10 19930604 <--
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US 1993-159184 19931129 <--
WO 1994-US2353 19940304 <--

AB An algorithm for selecting immunogenic oligopeptides capable of specifically binding glycoproteins encoded by HLA-A2.1 allele and inducing T cell activation in T cells restricted by the A2.1 allele. The peptides are useful to elicit an immune response against a target antigen. Identification of immunogenic oligopeptides from viral or tumor-related proteins was demonstrated.

IT **160213-68-3**
(HLA-A2.1-binding immunogenic peptide and algorithm for its identification)

RN 160213-68-3 HCAPLUS

CN L-Leucine, L-lysyl-L-leucyl-L-threonyl-L-prolyl-L-leucyl-L-cysteinyl-L-valyl-L-threonyl- (9CI) (CA INDEX NAME)

SEQ 1 KLTPLCVTL

Absolute stereochemistry.

L13 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2002 ACS
AN 1994:268197 HCAPLUS
DN 120:268197
TI Peptides that mimic HIV gp120 epitope and their use as AIDS vaccines
IN Butler, Peter Jonathan Gasking; Hacking, Graeme Norman Varey
PA Medical Research Council, UK
SO PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9402614	A1	19940203	WO 1993-GB1503	19930716 <--
	W: AT, AU, BB, BG, BR, BY, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, VN				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	ZA 9305165	A	19940314	ZA 1993-5165	19930716 <--
	EP 654080	A1	19950524	EP 1993-916096	19930716 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 07509237	T2	19951012	JP 1993-504265	19930716 <--
	AU 681591	B2	19970904	AU 1993-45788	19930716 <--
PRAI	GB 1992-15129		19920716 <--		
	WO 1993-GB1503		19930716 <--		

AB The invention provides a mol. comprising a peptide having the amino acid sequence lysine-proline-cysteine-valine-lysine-leucine-threonine-proline-leucine-cysteine-valine, wherein each cysteine residue is disulfide bridged to a further cysteine residue or is derivatized to simulate part of a disulfide bond, or functionally equiv. variants of such a peptide which mimic the immunogenic behavior of an epitope of gp120env. The sequence is highly conserved, being totally conserved in all listed isolates of HIV-1 and HIV-2, and undergoes only minor charges in isolates of SIV. With each cysteine residue contributing to a resp. disulfide bridge (actual or simulated by suitable derivitization), the mol. accurately mimics behavior of the corresponding sequence of gp120 and elicits an immune response. The mol. can thus be used as the basis of a potential vaccine against AIDS and AIDS related

conditions, and may find use in the treatment of AIDS and related conditions (no data). Immune serum raised in rabbits to the above-mentioned peptide disulfide-linked to a 2nd conserved peptide prevented HIV-1BRU infection of C8166 cells as effectively as did antisera to gp120env of HIV-1BRU.

IT **154858-93-2 154858-94-3**
(conserved epitope of HIV gp120env, for use as AIDS vaccine)

RN 154858-93-2 HCAPLUS

CN L-Phenylalanine, L-leucyl-L-isoleucyl-L-asparaginyl-L-cysteinyl-L-asparaginyl-L-arginyl-L-seryl-L-alanyl-L-isoleucyl-L-lysyl-L-α-glutamyl-L-seryl-L-cysteinyl-L-prolyl-L-lysyl-L-valyl-L-seryl-, cyclic (4→10'),(13→3')-bis(disulfide) with L-lysyl-L-prolyl-L-cysteinyl-L-valyl-L-lysyl-L-leucyl-L-threonyl-L-prolyl-L-leucyl-L-cysteinyl-L-valyl-L-threonyl-L-leucyl-L-tyrosine (9CI) (CA INDEX NAME)

NTE multichain

SEQ 1 LINCNRSAIK ESCPKVSF

1 KPCVKLTPLC VTLX 1406.

Absolute stereochemistry.

RN 154858-94-3 HCAPLUS

CN L-Tyrosine, L-lysyl-L-prolyl-S-[(acetylamino)methyl]-L-cysteinyl-L-valyl-L-lysyl-L-leucyl-L-threonyl-L-prolyl-L-leucyl-S-[(acetylamino)methyl]-L-cysteinyl-L-valyl-L-threonyl-L-leucyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 KPCVKLTPLC VTLY

Absolute stereochemistry.

=>

SEQ ID NO:14293

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=> d a65843a17/a ;d query
NAME            CREATED      NOTES/TITLE
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A65843A17/A     06 FEB 2002  1 ANSWER DUPLICATE REMOVE
                               (0 DUPLICATES REMOVED)
                             1 ANSWER IN FILE HCAPLUS
                             HLA-A2  HIV ENV 814


L1              2 SEA FILE=REGISTRY SLLNATDIAV/SQSP
L2              1 SEA FILE=REGISTRY L1 AND SQL < 15
L3              8 SEA FILE=HCAPLUS L2
L4              1 SEA FILE=HCAPLUS L3 AND (AY < 1994 OR PRY < 1994 OR PY < 1994)

L5              1 SEA FILE=HCAPLUS L3 AND 19940101-19940304/PD,AD,PRD
L6              1 SEA FILE=HCAPLUS L4 OR L5
L7              8 SEA FILE=DGENE SLLNATDIAV/SQSP
L8              6 SEA FILE=DGENE L7 AND SQL < 15
L9              5 SEA FILE=DGENE L8 NOT (AU9463594/PN OR AU9865979/PN OR
                  BR9406652/PN OR CA2157510/PN OR CN1118572/PN OR EP703783/PN OR
                  JP08507525/PN OR WO9420127/PN)
L10             0 SEA FILE=DGENE L9 AND (AY < 1994 OR PRY < 1994 OR PY < 1994)
L11             0 SEA FILE=DGENE L9 AND 19940101-19940304/PD,AD,PRD
L12             0 SEA FILE=DGENE L10 OR L11
L13             1 DUP REM L6 L12 (0 DUPLICATES REMOVED)


=> d 1-tot bib abs hitseq

L13  ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2002 ACS
AN   1995:294003  HCAPLUS
DN   122:263516
TI   HLA-A2.1 binding peptides and their detection and uses
IN   Grey, Howard M.; Sette, Alessandro; Sidney, John; Kast, W. Martin
PA   Cytel Corp., USA
SO   PCT Int. Appl., 138 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND  DATE          APPLICATION NO.  DATE
     ------------------  ----  --------      ---------------  --------
PI   WO 9420127          A1    19940915      WO 1994-US2353   19940304 <-- 58,309
         W:  AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU,
             JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO,
             RU, SD, SE, SI, SK, UA, UZ, VN
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
             BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
     CA 2157510          AA    19940915      CA 1994-2157510  19940304 <--
     AU 9463594          A1    19940926      AU 1994-63594    19940304 <--
     CN 1118572          A     19960313      CN 1994-191364   19940304 <--
     EP 703783           A1    19960403      EP 1994-910837   19940304 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
     JP 08507525         T2    19960813      JP 1994-520190   19940304 <--
     BR 9406652          A     19960910      BR 1994-6652     19940304 <--
     AU 9865979          A1    19980702      AU 1998-65979    19980518 <--
PRAI US 1993-27146 58.08      19930305  <--
     US 1993-73205 58.10      19930604  <--
     US 1993-159184 58.12     19931129  <--
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WO 1994-US2353 19940304 <--

AB An algorithm for selecting immunogenic oligopeptides capable of specifically binding glycoproteins encoded by HLA-A2.1 allele and inducing T cell activation in T cells restricted by the A2.1 allele. The peptides are useful to elicit an immune response against a target antigen. Identification of immunogenic oligopeptides from viral or tumor-related proteins was demonstrated.

IT **160213-70-7**
(HLA-A2.1-binding immunogenic peptide and algorithm for its identification)

RN 160213-70-7 HCAPLUS

CN L-Valine, L-seryl-L-leucyl-L-leucyl-L-asparaginyl-L-alanyl-L-threonyl-L-α-aspartyl-L-isoleucyl-L-alanyl- (9CI) (CA INDEX NAME)

SEQ 1 SLLNATDIAV

Absolute stereochemistry.

=>

SEQ ID NO: 144466

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=> d a65843a08/a :d query
NAME            CREATED      NOTES/TITLE
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A65843A08/A     06 FEB 2002  9 ANSWERS DUPLICATE REMOVE
                               (0 DUPLICATES REMOVED)
                             8 ANSWERS IN FILE HCAPLUS
                             1 ANSWER IN FILE DGENE
                             HLA-A24 HIV ENV 671


L1          620 SEA FILE=REGISTRY RYLKDQQLL/SQSP
L2           16 SEA FILE=REGISTRY L1 AND SQL < 15
L3           17 SEA FILE=HCAPLUS L2
L4            8 SEA FILE=HCAPLUS L3 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)

L5            3 SEA FILE=HCAPLUS L3 AND 19930101-19930806/PD,AD,PRD
L6            8 SEA FILE=HCAPLUS L4 OR L5
L7          317 SEA FILE=DGENE RYLKDQQLL/SQSP
L8           18 SEA FILE=DGENE L7 AND SQL < 15
L9           17 SEA FILE=DGENE L8 NOT (EP538283/PN OR EP261224/PN OR EP309566/P
                N OR EP449955/PN OR NO177463/PN OR AT100110/PN OR AT135113/PN
                OR AT150031/PN OR AT98376/PN OR AU614521/PN OR AU641375/PN OR
                AU664828/PN OR AU8772343/PN OR AU8817022/PN OR AU9048166/PN OR
                AU9181895/PN OR AU9211303/PN OR AU9481720/PN OR CA2005955/PN
                OR CA2086922/PN OR DK8706149/PN OR DK8806982/PN OR ES2098359/PN
                 OR FI8805806/PN OR IL98769/PN OR JP01503462/PN OR JP04502325/P
                N OR JP05508837/PN OR "JP2777160 B2"/PN OR "JP2994031 B2"/PN
                OR JP63502904/PN OR NO8805586/PN OR US5241047/PN OR US5260189/P
                N OR US5556744/PN OR US5662907/PN OR US5670309/PN OR US6037135/
                PN OR WO8706005/PN OR WO8808005/PN OR WO9007119/PN OR WO9200997
                /PN OR ZA8702166/PN OR ZA9105286/PN)
L10           1 SEA FILE=DGENE L9 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)
L11           1 SEA FILE=DGENE L9 AND 19930101-19930806/PD,AD,PRD
L12           1 SEA FILE=DGENE L10 OR L11
L13           9 DUP REM L6 L12 (0 DUPLICATES REMOVED)


=> d 1-tot bib abs hitseq seq

L13  ANSWER 1 OF 9  HCAPLUS  COPYRIGHT 2002 ACS
AN   2000:172837  HCAPLUS
DN   132:221339
TI   Methods for making HLA binding peptides and their uses
IN   Kubo, Ralph T.; Grey, Howard M.; Sette, Alessandro; Celis, Esteban
PA   Epimmune Inc., USA
SO   U.S., 329 pp., Cont.-in-part of U.S. Ser. No. 103,396, abandoned.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 4
     PATENT NO.          KIND  DATE                APPLICATION NO.   DATE
     ------------------  ----  --------            ----------------  --------
PI   US 6037135 5,037    A     20000314            US 1993-159339    19931129 <--
     US 5662907 5,662     A     19970902            US 1994-186266    19940125 <--
PRAI US 1992-926666             19920807  <--
     US 1993-27746              19930305  <--
     US 1993-103396             19930806  <--
     US 1993-159339             19931129
```

AB Disclosed are methods for making peptides comprising an HLA-A24.1-, HLA-A1-, HLA-A11-, and HLA-A3.2-restricted T cell epitope consisting of about 8-11 amino acid residues, and methods of making a peptide that binds to an HLA-A24.1, HLA-A1, HLA-A11, and HLA-A3.2 mol. at a dissocn. const. of less than 500 nM. Epitopes on a no. of potential target proteins (e.g. prostate specific antigen, hepatitis B core and surface antigens, hepatitis C antigen, malignant melanoma antigen MAGE-1, Epstein-Barr virus antigens, HIV-1 and papilloma virus antigen) are identified. These HLA-binding peptides are useful for treating and diagnosing a no. of pathol. states such as viral infection and cancer.

IT **181631-93-6**
(HLA binding epitopes of viral and tumor antigen for treatment and diagnosis)

RN 181631-93-6 HCAPLUS

CN L-Leucine, L-arginyl-L-tyrosyl-L-leucyl-L-lysyl-L-α-aspartyl-L-glutaminyl-L-glutaminyl-L-leucyl- (9CI) (CA INDEX NAME)

SEQ 1 RYLKDQQLL

Absolute stereochemistry.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2002 ACS
AN 1996:590883 HCAPLUS
DN 125:299412
TI Methods and compositions for diagnosing and treating certain HIV infected patients
IN Weiner, David B.; Ugen, Kenneth E.; Williams, William V.
PA University of Pennsylvania, USA; Wistar Institute of Anatomy and Biology
SO U.S., 63 pp. Cont.-in-part of U.S. Ser. No. 891, 451, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5556744	A	19960917	US 1994-218025	19940324 <--
PRAI	US 1992-891451		19920529 <--		

AB The present invention provides a panel of HIV peptides derived from gp41 and gp120 useful in diagnosing whether or not a patient is of vertical HIV transmission status, methods for diagnosing the same, methods for identifying epitopes and peptides assocd. with non-transmission status, and pharmaceutical and vaccine compns. contg. the same.

IT **182882-57-1**
(HIV diagnosis and therapy based on gp41 and gp120 peptides)

RN 182882-57-1 HCAPLUS

CN L-Phenylalanine, N-[N-[N-[N-[N2-[N2-[N-[N2-[N-[N-(N2-L-α-glutamyl-L-arginyl)-L-tyrosyl]-L-leucyl]-L-lysyl]-L-α-aspartyl]-L-glutaminyl]-L-glutaminyl]-L-leucyl]-L-leucyl]glycyl]- (9CI) (CA INDEX NAME)

SEQ 1 ERYLKDQQLL GF

Absolute stereochemistry.

L13 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2002 ACS
AN 1992:529835 HCAPLUS
DN 117:129835
TI Synthetic peptides and mixtures thereof for detecting HIV (human immunodeficiency virus) antibodies and for vaccines
IN Lacroix, Martial
PA IAF Biochem International Inc., Can.
SO PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9200997	A1	19920123	WO 1991-CA233	19910708 <--
	W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MC, MG, MN, MW, NL, NO, PL, RO, SD, SE, SU				
	RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, ML, MR, NL, SE, SN, TD, TG				
	US 5241047	A	19930831	US 1990-549964	19900709 <--
	CA 2086922	AA	19920110	CA 1991-2086922	19910708 <--
	AU 9181895	A1	19920204	AU 1991-81895	19910708 <--
	AU 664828	B2	19951207		
	ZA 9105286	A	19930331	ZA 1991-5286	19910708 <--
	EP 538283	A1	19930428	EP 1991-911697	19910708 <--
	EP 538283	B1	19970312		
	EP 538283	B2	20010801		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 05508837	T2	19931209	JP 1991-511311	19910708 <--
	AT 150031	E	19970315	AT 1991-911697	19910708 <--
	ES 2098359	T3	19970501	ES 1991-911697	19910708 <--
	IL 98769	A1	19971120	IL 1991-98769	19910709 <--
PRAI	US 1990-549964	A	19900709 <--		
	US 1988-148821	A2	19880127 <--		
	US 1988-185518	A2	19880422 <--		
	US 1988-281205	A2	19881207 <--		
	WO 1991-CA233	A	19910708 <--		

AB Cyclic peptides comprising sequences from HIV-1 virus gp41 and HIV-2 virus gp36 (Markush structures given) are disclosed for detection of antibodies to HIV-1 and HIV-2. Uses of the peptides as vaccines and for prodn. of antibodies for antigen detection are also disclosed. A synthesis scheme for the peptides is presented, as well as an ELISA for antibody detection.

IT **142879-46-7D**, cyclic HIV-1 and HIV-2 virus peptide derivs.
142879-47-8D, cyclic HIV-1 and HIV-2 virus peptide derivs.
(amino acid sequence, for detection of antibodies to HIV-1 and HIV-2 virus)

RN 142879-46-7 HCAPLUS
CN Glycine, L-arginyl-L-tyrosyl-L-leucyl-L-lysyl-L-α-aspartyl-L-glutaminyl-L-glutaminyl-L-leucyl-L-leucylglycyl-L-isoleucyl-L-tryptophyl- (9CI) (CA INDEX NAME)

SEQ 1 RYLKDQQLLG IWG

Absolute stereochemistry.

RN 142879-47-8 HCAPLUS

CN Glycine, L-α-glutamyl-L-arginyl-L-tyrosyl-L-leucyl-L-lysyl-L-α-aspartyl-L-glutaminyl-L-glutaminyl-L-leucyl-L-leucylglycyl-L-isoleucyl-L-tryptophyl- (9CI) (CA INDEX NAME)

SEQ 1 ERYLKDQQLL GIWG

Absolute stereochemistry.

L13 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2002 ACS
AN 1992:172138 HCAPLUS
DN 116:172138
TI Identification of overlapping HLA class I-restricted cytotoxic T cell epitopes in a conserved region of the human immunodeficiency virus type 1 envelope glycoprotein: definition of minimum epitopes and analysis of the effects of sequence variation
AU Johnson, R. Paul; Trocha, Alicja; Buchanan, Thomas M.; Walker, Bruce D.
CS Massachusetts Gen. Hosp., Boston, MA, 02114, USA
SO J. Exp. Med. (1992), 175(4), 961-71
CODEN: JEMEAV; ISSN: 0022-1007
DT Journal
LA English
AB Although the immunol. basis of protective immunity in human immunodeficiency virus type 1 (HIV-1) infection has not yet been defined, virus-specific cytotoxic T lymphocytes (CTL) are likely to be an important host defense and may be a crit. feature of an effective vaccine. These observations, along with the inclusion of the HIV-1 envelope in the majority of vaccine candidates presently in clin. trials, underscore the importance of the precise characterization of the cellular immune responses to this protein. Although humoral immune responses to the envelope protein have been extensively characterized, relatively little information is available regarding the envelope epitopes recognized by virus-specific CTL and the effects of sequence variation within these epitopes. Here is reported the identification of 2 overlapping CTL epitopes in a highly conserved region of the HIV-1 transmembrane envelope protein, gp41, using CTL clones derived from 2 seropos. subjects. An 8-amino acid peptide was defined as the min. epitope recognized by HLA-B8-restricted CTL derived from one subject, and in a second subject, an overlapping 9-amino acid peptide was identified as the minimal epitope for HLA-B14-restricted CTL clones. Selected single amino acid substitutions representing those found in naturally occurring HIV-1 isolates resulted in partial to complete loss of recognition of these epitopes. These data indicate the presence of a highly conserved region in the HIV-1 envelope glycoprotein that is immunogenic for CTL responses. In addn., they suggest that natural sequence variation may lead to escape from immune detection by HIV-1-specific CTL. Since the region contg. these epitopes has been previously shown to contain an immunodominant B cell epitope and also overlaps with a major histocompatibility complex class II T cells epitope recognized by CD4+ CTL from HIV-1 rgp160 vaccine recipients, it may be particularly important for HIV-1 vaccine development. Finally, the identification of minimal CTL epitopes presented by class I HLA mols. should facilitate the definition of allele-specific motifs.
IT **140397-26-8**
(cytotoxic T-cell recognition of, of HIV-1, HLA-B8- and HLA-B14 antigen-restricted, vaccine in relation to)
RN 140397-26-8 HCAPLUS
CN Glycine, L-α-glutamyl-L-arginyl-L-tyrosyl-L-leucyl-L-lysyl-L-α-aspartyl-L-glutaminyl-L-glutaminyl-L-leucyl-L-leucyl- (9CI) (CA INDEX

NAME)

SEQ 1 SRYLKDQQLL G

Absolute stereochemistry.

L13 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2002 ACS
AN 1991:141399 HCAPLUS
DN 114:141399
TI Synthetic human immunodeficiency virus (HIV)-1like peptides, reagents and kits containing them, and their use in detection of anti-HIV antibodies
IN Formoso, Carl; Olsen, Duane A.; Buchanan, Thomas M.
PA Immunodiagnostics, Inc., USA
SO PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9007119	A1	19900628	WO 1989-US5640	19891215 <--
	W: AU, DK, JP, NO				
	RW: AT, BE, CH, DE, ES, FR, GB, IT, LU, NL, SE				
	AU 9048166	A1	19900710	AU 1990-48166	19891215 <--
	AU 641375	B2	19930923		
	EP 449955	A1	19911009	EP 1990-901389	19891215 <--
	EP 449955	B1	19960306		
	R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE				
	JP 04502325	T2	19920423	JP 1990-501588	19891215 <--
	AT 135113	E	19960315	AT 1990-901389	19891215 <--
	JP 2994031	B2	19991227	JP 1989-501588	19891215 <--
	CA 2005955	AA	19900620	CA 1989-2005955	19891219 <--
	US 5260189	A	19931109	US 1992-962612	19921015 <--
PRAI	US 1988-287412		19881220 <--		
	WO 1989-US5640		19891215 <--		
	US 1992-840641		19920224 <--		

AB Highly immunoreactive regions of gp41 of HIV-1, gp32 of HIV-2, and p24 of HIV-1 are identified using synthetic peptides. Superior immunoassay performance is obtained with these peptides linked to carrier proteins, as compared to use of the free peptides. Addnl. (un)natural variants of these reactive regions define a set of peptides that, as cysteine-linked peptide-protein conjugates, provide optimal immunoassay performance, including high immunoreactivity with HIV antibody-pos. samples, low reactivity with neg. samples, high discrimination between pos. and neg. samples, and high specificity. The conjugates also permit simultaneous detection of HIV-1 and HIV-2 antibodies and make possible rapid and simple test formats that require no instrumentation for the detection of these antibodies. Thus, 2 peptides (4S36 and 5S76) corresponding to HIV-1 gp41 peptides were conjugated to bovine serum albumin (BSA) and used in an EIA to test 30 anti-HSV-1 antibody pos-sera, 234 anti-HIV-2/simian immunodeficiency virus (SIV) antibody pos. sera, 15 anti-HIV-1 antibody neg. sera, and 15 anti-HIV-2/SIV antibody neg. sera. The conjugated peptides detected only the anti-HIV-1 antibody-pos. samples, and missed all 23 anti-HIV-2 antibody pos. samples. Neg. sea tested neg. A combination of conjugated 4S36 and 5S76 peptides and conjugated peptides corresponding to HIV-2/SIV natural peptides, detected all anti-HIV-1 antibody and anti-HIV-2 antibody samples.

IT **132809-66-6D**, albumin conjugates

(for anti-human immunodeficiency virus-1 antibody detn.)

RN 132809-66-6 HCAPLUS
CN L-Cysteine, L-alanyl-L-valyl-L-α-glutamyl-L-arginyl-L-tyrosyl-L-leucyl-L-lysyl-L-α-aspartyl-L-glutaminyl-L-glutaminyl-L-leucyl-L-leucylglycyl- (9CI) (CA INDEX NAME)

SEQ 1 AVERYLKDQQ LLGC

Absolute stereochemistry.

L13 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2002 ACS
AN 1989:476041 HCAPLUS
DN 111:76041
TI Analysis of a subclass-restricted HIV-1 gp41 epitope by omission peptides
AU Mathiesen, T.; Chiodi, F.; Broliden, P. A.; Albert, J.; Houghten, R. A.; Utter, G.; Wahren, B.; Norrby, E.
CS Dep. Virol., Natl. Bacteriol. Lab., Stockholm, S-105 21, Swed.
SO Immunology (1989), 67(1), 1-7
CODEN: IMMUAM; ISSN: 0019-2805
DT Journal
LA English
AB To define the amino acids involved in IgG subclass reactivity to 2 overlapping human immunodeficiency virus (HIV)-1 gp41 (E34/32; amino acid positions 582-613) peptides, sera from HIV-infected individuals were studied. Peptides mimicking E34 but with single amino acid deletions or glycine substitutions were used to define the amino acid residues necessary for antibody binding. Two dominating immunogenic epitopes, contg. highly hydrophilic amino acids, were found on the original peptide. Further anal. was undertaken with 2 corresponding omission sets of dodecapeptides representing halves of the complete E34 plus a terminal cysteine peptide. The subclass reactivities usually differed between the patients with regard to the epitopes with which the different IgG subclasses reacted and also to the importance of different amino acids in antibody binding. The 600 glycine and the 601 lysine were involved in the binding of all IgG1, 2, and 4, and most IgG3. The development of E34/32-reactive IgM and IgG subclasses showed different patterns in 4 patients with primary HIV infections, contradicting the existence of a general pattern for the development of IgG subclasses to this peptide. Thus, different progenitor clones are selected for synthesis of the different subclasses.
IT **121952-30-5 121952-38-3 121952-39-4**
121952-40-7
(IgG subclass reactivity to, of human immunodeficiency virus-1 glycoprotein gp41)
RN 121952-30-5 HCAPLUS
CN L-Leucine, N-[N-[N2-[N2-[N-[N2-[N-[N-[N2-[N-(N-L-alanyl-L-valyl)-L-α-glutamyl]-L-arginyl]-L-tyrosyl]-L-leucyl]-L-lysyl]-L-α-aspartyl]-L-glutaminyl]-L-glutaminyl]-L-leucyl]- (9CI) (CA INDEX NAME)

SEQ 1 AVERYLKDQQ LL

Absolute stereochemistry.

RN 121952-38-3 HCAPLUS
CN L-Leucine, N-[N-[N2-[N2-[N-[N2-[N-[N-[N2-(N-L-alanyl-L-valyl)-L-arginyl]-L-tyrosyl]-L-leucyl]-L-lysyl]-L-α-aspartyl]-L-glutaminyl]-L-

glutaminyl]-L-leucyl]- (9CI) (CA INDEX NAME)

SEQ 1 AVRYLKDQQL L

Absolute stereochemistry.

RN 121952-39-4 HCAPLUS
CN L-Leucine, N-[N-[N2-[N2-[N-[N2-[N-[N-[N2-(N-L-alanyl-L-α-glutamyl)-L-arginyl]-L-tyrosyl]-L-leucyl]-L-lysyl]-L-α-asparty1]-L-glutaminyl]-L-glutaminyl]-L-leucyl]- (9CI) (CA INDEX NAME)

SEQ 1 AERYLKDQQL L

Absolute stereochemistry.

RN 121952-40-7 HCAPLUS
CN L-Leucine, N-[N-[N2-[N2-[N-[N2-[N-[N-[N2-(N-L-valyl-L-α-glutamyl)-L-arginyl]-L-tyrosyl]-L-leucyl]-L-lysyl]-L-α-asparty1]-L-glutaminyl]-L-glutaminyl]-L-leucyl]- (9CI) (CA INDEX NAME)

SEQ 1 VERYLKDQQL L

Absolute stereochemistry.

L13 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2002 ACS
AN 1989:630559 HCAPLUS
DN 111:230559
TI STLV-III (simian T-lymphotrophic virus type III)-related polypeptides, diagnostic systems, and assay methods
IN Norrby, Erling C. J.; Parks, D. Elliot; Lerner, Richard A.
PA Johnson and Johnson, USA
SO PCT Int. Appl., 93 pp.
CODEN: PIKXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 8808005	A1	19881020	WO 1988-US1140	19880408 <--
	W: AU, DK, FI, JP, NO				
	RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
	AU 8817022	A1	19881104	AU 1988-17022	19880408 <--
	AU 614521	B2	19910905		
	EP 309566	A1	19890405	EP 1988-904066	19880408 <--
	EP 309566	B1	19940112		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	JP 01503462	T2	19891122	JP 1988-503630	19880408 <--
	JP 2777160	B2	19980716		
	AT 100110	E	19940115	AT 1988-904066	19880408 <--
	FI 8805806	A	19881215	FI 1988-5806	19881215 <--
	NO 8805586	A	19881215	NO 1988-5586	19881215 <--
	NO 177463	B	19950612		

	NO 177463	C	19950920		
	DK 8806982	A	19890216	DK 1988-6982	19881215 <--
	US 5670309	A	19970923	US 1994-192782	19940207 <--
PRAI	SE 1987-1628		19870416 <--		
	US 1987-83682		19870807 <--		
	EP 1988-904066		19880408 <--		
	WO 1988-US1140		19880408 <--		
	US 1990-597096		19901015 <--		
	US 1991-782742		19911017 <--		
	US 1993-61274		19930513 <--		

AB STLV-III-related polypeptides capable of mimicking a specific linear antigenic determinant of the HIV-2 (human immunodeficiency virus type 2) TMP (trans-membrane protein) are described. Methods for using the polypeptides to detn. anti-HIV-2 antibodies in a body fluid, and diagnostic systems for detecting anti-HIV-2 antibodies and distinguishing between exposure to HIV-2 and HIV-1 are also described. Peptides that react with HIV-2 antibodies contain the sequence Cys-Ala-Phe-Arg-Gln-Val- Cys, while those that react with HIV-1 antibodies contain the sequence Cys-Ser-Gly-Lys-Leu-Ile-Cys. HIV-1 specific peptides Ile-Trp-Gly-Cys-Ser- Gly-Lys-Leu-Ile-Cys-Thr-Thr-Ala-Val-Pro-Trp-Asn-Ala-Ser and Ala-Val-Glu-Arg-Tyr-Leu-Lys-Asp-Gln-Gln-Leu-Leu-Gly-Ile-Trp-Gly-Cys-Ser- Gly-Lys-Leu-Ile, and STLV-III peptide p80 (HIV-2 specific) Ala-Ile-Glu-Lys-Tyr-Leu-Glu-Asp-Gln-Ala-Gln-Leu-Asn-Ala-Trp-Cys-Ala-Phe- Arg-Gln-Val-Cys, synthesized by the Merrifield technique and coupled to microtiter plates, were used in ELISA assays to distinguish between HIV-1 and HIV-2 infection. Two sera that reacted with both sets of peptides were from individuals believed to have been exposed to both HIV-1 and HIV-2. All other pos. sera reacted only with HIV-1-related or else HIV-2-related peptides. Neg. sera remained unreactive.

IT **115815-52-6P**
(human immunodeficiency virus type 1-related peptide, prepn. of, for immunoassays)

RN 115815-52-6 HCAPLUS

CN Glycine, L-alanyl-L-valyl-L-α-glutamyl-L-arginyl-L-tyrosyl-L-leucyl-L-lysyl-L-α-aspartyl-L-glutaminyl-L-glutaminyl-L-leucyl-L-leucyl- (9CI) (CA INDEX NAME)

SEQ 1 AVERYLKDQQ LLG

Absolute stereochemistry.

L13 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2002 ACS

AN 1988:491111 HCAPLUS

DN 109:91111

TI Synthetic HTLV-III peptides, compositions and kits containing them, and their use in immunoassays, immunization, and antibody production

IN Rosen, Jonathan I.; Naso, Robert B.; Arlinghaus, Ralph B.

PA Ortho Pharmaceutical Corp., USA

SO PCT Int. Appl., 63 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 8706005	A1	19871008	WO 1987-US577	19870320 <--

W: AU, DK, JP, KR, US
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE

AU 8772343	A1	19871020	AU 1987-72343	19870320 <--
EP 261224	A1	19880330	EP 1987-902905	19870320 <--
EP 261224	B1	19931208		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 63502904	T2	19881027	JP 1987-502267	19870320 <--
AT 98376	E	19931215	AT 1987-902905	19870320 <--
ZA 8702166	A	19881026	ZA 1987-2166	19870324 <--
DK 8706149	A	19871123	DK 1987-6149	19871123 <--
AU 9211303	A1	19920604	AU 1992-11303	19920227 <--
AU 9481720	A1	19950323	AU 1994-81720	19941223 <--
PRAI US 1986-843437		19860324 <--		
EP 1987-902905		19870320 <--		
WO 1987-US577		19870320 <--		

AB Peptides are synthesized which mimic a portion of proteins produced by human T-cell lymphotropic virus type III (HTLV-III) and related viruses. The peptide Ile-Trp-Gly-Cys-Ser-Gly-Lys-Leu-Ile-Cys-Thr-Thr-Ala-Val-Pro (I) was prepd. by an automated Merrifield procedure. Sera from normal subjects and patients with AIDS and various other disorders were tested for anti-HTLV-III antibody with a competitive ELISA using a I-coated plate and peroxidase-labeled goat anti-human IgG antibody. Only known AIDS patients and 50% of patients with unknown disorders who were 0 pos. for HTLV-III antibody by com. tests gave pos. tests results.

IT **115815-52-6P**
(prepn. of, as AIDS virus synthetic antigen)

RN 115815-52-6 HCAPLUS

CN Glycine, L-alanyl-L-valyl-L-α-glutamyl-L-arginyl-L-tyrosyl-L-leucyl-L-lysyl-L-α-aspartyl-L-glutaminyl-L-glutaminyl-L-leucyl-L-leucyl- (9CI) (CA INDEX NAME)

SEQ 1 AVERYLKDQQ LLG

Absolute stereochemistry.

L13 ANSWER 9 OF 9 DGENE COPYRIGHT 2002 DERWENT INFORMATION LTD

AN AAY38222 Peptide DGENE

TI Peptide which specifically binds selected MHC allele - used to induce an immune response for treatment or prevention of viral infection or cancer, or for diagnosis

IN Celis E; Grey H M; Kubo R T; Sette A

PA (CYTE-N) CYTEL CORP.

PI WO 9403205 A1 19940217 150p

AI **WO 1993-US7421 19930806**

PRAI **US 1993-27746 19930305**
US 1992-926666 19920807

DT Patent

LA English

OS 1994-065403 [08]

AN AAY38222 Peptide DGENE

AB The sequence is a specific example of a group of new immunogenic peptides having an HLA-A3.2, HLA-A1, HLA-A11 or HLA-A24.1 binding motif. For example, the peptides having an HLA-A3.2 binding motif each have 9-10 residues and contain, from the N-terminus to the C-terminus, (a) a first conserved residue selected from L, M, I, V, S, A, T, F, C, G, D and E and (b) a second conserved residue of K, R, Y, H or F, where the first and second conserved residues are separated by 6-7 residues. The peptides are capable of binding selected MHC molecules and inducing an immune response. They can be used to treat and/or prevent viral infection and cancer, e.g. prostate cancer,

lymphoma, hepatitis or AIDS. They can also be used to produce antibodies for use as diagnostic or therapeutic agents. The peptides can also be used as diagnostic agents.

SEQ
1 rylkdqql1
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HITS AT: 1-9

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SEQ ID NO: 14439

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                             1 ANSWER IN FILE DGENE
                             HLA-A3  HIV POL 722


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L5           2 SEA FILE=HCAPLUS L3 AND 19930101-19930806/PD,AD,PRD
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L8           4 SEA FILE=DGENE L7 AND SQL < 15
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               EP726941/PN OR US5662907/PN OR US5846827/PN OR US6037135/PN OR
               WO9504817/PN)
L10          1 SEA FILE=DGENE L9 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)
L11          1 SEA FILE=DGENE L9 AND 19930101-19930806/PD,AD,PRD
L12          1 SEA FILE=DGENE L10 OR L11
L13          3 DUP REM L6 L12 (0 DUPLICATES REMOVED)

=> d 1-tot bib abs hitseq seq

L13  ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2002 ACS
AN   2000:172837  HCAPLUS
DN   132:221339
TI   Methods for making HLA binding peptides and their uses
IN   Kubo, Ralph T.; Grey, Howard M.; Sette, Alessandro; Celis, Esteban
PA   Epimmune Inc., USA
SO   U.S., 329 pp., Cont.-in-part of U.S. Ser. No. 103,396, abandoned.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 4
     PATENT NO.          KIND  DATE          APPLICATION NO.  DATE
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PI   US 6037135 50.9     A     20000314      US 1993-159339   19931129 <--
     US 5662907 50.40    A     19970902      US 1994-186266   19940125 <--
PRAI US 1992-926666              19920807  <--
     US 1993-27746               19930305  <--
     US 1993-103396              19930806  <--
     US 1993-159339              19931129
AB   Disclosed are methods for making peptides comprising an HLA-A24.1-, HLA-A1-,
     HLA-A11-, and HLA-A3.2-restricted T cell epitope consisting of about 8-11
     amino acid residues, and methods of making a peptide that binds to an HLA-
     A24.1, HLA-A1, HLA-A11, and HLA-A3.2 mol. at a dissocn. const. of less than
     500 nM. Epitopes on a no. of potential target proteins (e.g. prostate
     specific antigen, hepatitis B core and surface antigens, hepatitis C antigen,
     malignant melanoma antigen MAGE-1, Epstein-Barr virus antigens, HIV-1 and
     papilloma virus antigen) are identified. These HLA-binding peptides are
     useful for treating and diagnosing a no. of pathol. states such as viral
     infection and cancer.
```

IT 162886-80-8
(HLA binding epitopes of viral and tumor antigen for treatment and diagnosis)
RN 162886-80-8 HCAPLUS
CN L-Lysine, L-lysyl-L-valyl-L-tyrosyl-L-leucyl-L-alanyl-L-tryptophyl-L-valyl-L-prolyl-L-alanyl-L-histidyl- (9CI) (CA INDEX NAME)

SEQ 1 KVYLAWVPAH K

Absolute stereochemistry.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2002 ACS
AN 1995:538424 HCAPLUS
DN 122:288925
TI Methods for ex vivo therapy using peptide-loaded antigen-presenting cells for the activation of cytotoxic T lymphocytes
IN Celis, Esteban; Kubo, Ralph; Serra, Horacio; Tsai, Van; Wentworth, Peggy
PA Cytel Corp., USA
SO PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9504817	A1	19950216	WO 1994-US8672	19940801 <-- 92.00PC
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN				
RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2168950	AA	19950216	CA 1994-2168950	19940801 <--
AU 9474783	A1	19950228	AU 1994-74783	19940801 <--
EP 726941	A1	19960821	EP 1994-924539	19940801 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
US 5846827	A	19981208	US 1995-468454	19950606 <-- 92.10 US
PRAI US 1993-103401		19930806 <-- 92.00US		
WO 1994-US8672		19940801	92.00PC	

AB Methods for activating cytotoxic T lymphocytes (CTL) in vitro are presented in conjunction with methods for using the activated CTL for therapy in vivo. Addnl., a method for killing specific CTL in vivo is presented using antigen-presenting cells which were modified in vitro. The method comprises (1) dissocg. bound peptides from class I MHC mols. on antigen-presenting cells using a mild acid treatment, (2) assocg. desired immunogenic peptides with the class I MHC mols. on the antigen-presenting cells, and (3) incubating the antigen-presenting cells with the cytotoxic T cells in the presence of a growth factor, thereby producing activated cytotoxic T cells. The step of dissocg. bound peptides is carried out by incubating the antigen-presenting cells (e.g., SAC-I-activated peripheral blood mononuclear cells) in a glycine or citrate-phosphate buffer soln. at pH 3. Immunogenic peptides are assocd. with MHC mols. by incubation of the antigen-presenting cells with 10-50 μg/mL immunogenic peptide, followed by incubation of the cells with the cytotoxic T cells for about 7-10 days. The growth factors can be interleukin-7 added at day 0 and day 7, or interleukin-2 added after day 7. Of the immunogenic peptides tested to date, 12 of 60 MAGE peptides, 13 of 53 HIV peptides, 3 of

25 hepatitis C virus peptides, and 7 of 28 hepatitis B virus peptides induced primary CTL in vitro. The cytotoxic T cells are useful in the treatment of cancer, AIDS, hepatitis, bacterial infection, fungal infection, malaria, or tuberculosis.

IT 162886-80-8
(methods for ex vivo therapy using peptide-loaded antigen-presenting cells for the activation of cytotoxic T lymphocytes)

RN 162886-80-8 HCAPLUS
CN L-Lysine, L-lysyl-L-valyl-L-tyrosyl-L-leucyl-L-alanyl-L-tryptophyl-L-valyl-L-prolyl-L-alanyl-L-histidyl- (9CI) (CA INDEX NAME)

SEQ 1 KVYLAWVPAH K

Absolute stereochemistry.

L13 ANSWER 3 OF 3 DGENE COPYRIGHT 2002 DERWENT INFORMATION LTD
AN AAR49231 Protein DGENE
TI Peptide which specifically binds selected MHC allele - used to induce an immune response for treatment or prevention of viral infection or cancer, or for diagnosis
IN Celis E; Grey H M; Kubo R T; Sette A
PA (CYTE-N) CYTEL CORP.
PI WO 9403205 A 19940217 50,20pc 150p
AI **WO 1993-US7421 19930806**
PRAI **US 1992-926666 19920807**
US 1993-27746 19930305
DT Patent
LA English
OS 1994-065403 [08]
AN AAR49231 Protein DGENE
AB The sequences given in AAR47304-33 and AAR49201-44 are immunogenic peptides which have a HLA-A3.2, HLA-A1 or a HLA-A11 binding motif. These peptides may be used in the composition of the invention. These peptidas are capable of binding selected MHC molecules and inducing an immune response. They can be used to treat and/or prevent viral infection and cancer, eg. prostate cancer, lymphoma, hepatitis or AIDS. They can also be used to produce antibodies for use as diagnostic or therapeutic agents. The peptides can also be used as diagnostic agents.

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SEQ ID NO: 14440

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                                 1 ANSWER IN FILE DGENE
                                 HLA-A3  HIV POL 971


L1          229 SEA FILE=REGISTRY KIQNFRVYYR/SQSP
L2            1 SEA FILE=REGISTRY L1 AND SQL < 15
L3            4 SEA FILE=HCAPLUS L2
L4            1 SEA FILE=HCAPLUS L3 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)

L5            1 SEA FILE=HCAPLUS L3 AND 19930101-19930806/PD,AD,PRD
L6            1 SEA FILE=HCAPLUS L4 OR L5
L7           77 SEA FILE=DGENE KIQNFRVYYR/SQSP
L8            3 SEA FILE=DGENE L7 AND SQL < 15
L9            3 SEA FILE=DGENE L8 NOT (US5662907/PN OR US6037135/PN)
L10           1 SEA FILE=DGENE L9 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)
L11           1 SEA FILE=DGENE L9 AND 19930101-19930806/PD,AD,PRD
L12           1 SEA FILE=DGENE L10 OR L11
L13           2 DUP REM L6 L12 (0 DUPLICATES REMOVED)


=> d 1-tot bib abs hitseq seq

L13  ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2002 ACS
AN   2000:172837  HCAPLUS
DN   132:221339
TI   Methods for making HLA binding peptides and their uses
IN   Kubo, Ralph T.; Grey, Howard M.; Sette, Alessandro; Celis, Esteban
PA   Epimmune Inc., USA
SO   U.S., 329 pp., Cont.-in-part of U.S. Ser. No. 103,396, abandoned.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 4
     PATENT NO.          KIND  DATE              APPLICATION NO.   DATE
     ----------          ----  --------          ---------------   --------
PI   US 6037135 50.39    A     20000314          US 1993-159339    19931129 <--
     US 5662907 50.40    A     19970902          US 1994-186266    19940125 <--
PRAI US 1992-926666              19920807  <--
     US 1993-27746               19930305  <--
     US 1993-103396              19930806  <--
     US 1993-159339              19931129
AB   Disclosed are methods for making peptides comprising an HLA-A24.1-, HLA-A1-,
     HLA-A11-, and HLA-A3.2-restricted T cell epitope consisting of about 8-11
     amino acid residues, and methods of making a peptide that binds to an HLA-
     A24.1, HLA-A1, HLA-A11, and HLA-A3.2 mol. at a dissocn. const. of less than
     500 nM.  Epitopes on a no. of potential target proteins (e.g. prostate
     specific antigen, hepatitis B core and surface antigens, hepatitis C antigen,
     malignant melanoma antigen MAGE-1, Epstein-Barr virus antigens, HIV-1 and
     papilloma virus antigen) are identified.  These HLA-binding peptides are
     useful for treating and diagnosing a no. of pathol. states such as viral
     infection and cancer.
IT   250728-43-9
        (HLA binding epitopes of viral and tumor antigen for treatment and
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diagnosis)
RN 250728-43-9 HCAPLUS
CN L-Arginine, L-lysyl-L-isoleucyl-L-glutaminyl-L-asparaginyl-L-phenylalanyl-L-arginyl-L-valyl-L-tyrosyl-L-tyrosyl- (9CI) (CA INDEX NAME)

SEQ 1 KIQNFRVYYR

Absolute stereochemistry.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 2 DGENE COPYRIGHT 2002 DERWENT INFORMATION LTD
AN AAY38257 Peptide DGENE
TI Peptide which specifically binds selected MHC allele - used to induce an immune response for treatment or prevention of viral infection or cancer, or for diagnosis
IN Celis E; Grey H M; Kubo R T; Sette A
PA (CYTE-N) CYTEL CORP.
PI WO 9403205 A1 19940217 50.10pc 150p
AI **WO 1993-US7421 19930806**
PRAI **US 1993-27746 19930305**
US 1992-926666 19920807
DT Patent
LA English
OS 1994-065403 [08]
AN AAY38257 Peptide DGENE
AB The sequence is a specific example of a group of new immunogenic peptides having an HLA-A3.2, HLA-A1, HLA-A11 or HLA-A24.1 binding motif. For example, the peptides having an HLA-A3.2 binding motif each have 9-10 residues and contain, from the N-terminus to the C-terminus, (a) a first conserved residue selected from L, M, I, V, S, A, T, F, C, G, D and E and (b) a second conserved residue of K, R, Y, H or F, where the first and second conserved residues are separated by 6-7 residues. The peptides are capable of binding selected MHC molecules and inducing an immune response. They can be used to treat and/or prevent viral infection and cancer, e.g. prostate cancer, lymphoma, hepatitis or AIDS. They can also be used to produce antibodies for use as diagnostic or therapeutic agents. The peptides can also be used as diagnostic agents.

SEQ
1 kiqnfrvyyr
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HITS AT: 1-10

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SEQ ID NO: 1444 |

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=> d a65843a11/a ;d query
NAME            CREATED      NOTES/TITLE
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A65843A11/A     06 FEB 2002  3 ANSWERS DUPLICATE REMOVE
                               (0 DUPLICATES REMOVED)
                             1 ANSWER IN FILE HCAPLUS
                             2 ANSWERS IN FILE DGENE
                             HLA-A3  HIV POL 353


L1          589 SEA FILE=REGISTRY MTKILEPFR/SQSP
L2            5 SEA FILE=REGISTRY L1 AND SQL < 15
L3            9 SEA FILE=HCAPLUS L2
L4            1 SEA FILE=HCAPLUS L3 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)

L5            1 SEA FILE=HCAPLUS L3 AND 19930101-19930806/PD,AD,PRD
L6            1 SEA FILE=HCAPLUS L4 OR L5
L7          158 SEA FILE=DGENE MTKILEPFR/SQSP
L8            8 SEA FILE=DGENE L7 AND SQL < 15
L9            8 SEA FILE=DGENE L8 NOT (US5662907/PN OR US6037135/PN)
L10           2 SEA FILE=DGENE L9 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)
L11           2 SEA FILE=DGENE L9 AND 19930101-19930806/PD,AD,PRD
L12           2 SEA FILE=DGENE L10 OR L11
L13           3 DUP REM L6 L12 (0 DUPLICATES REMOVED)


=> d 1-tot bib abs hitseq seq

L13  ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2002 ACS
AN   2000:172837  HCAPLUS
DN   132:221339
TI   Methods for making HLA binding peptides and their uses
IN   Kubo, Ralph T.; Grey, Howard M.; Sette, Alessandro; Celis, Esteban
PA   Epimmune Inc., USA
SO   U.S., 329 pp., Cont.-in-part of U.S. Ser. No. 103,396, abandoned.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 4
     PATENT NO.          KIND  DATE          APPLICATION NO.   DATE
     ----------          ----  --------      ---------------   --------
PI   US 6037135 50.7     A     20000314      US 1993-159339    19931129 <--
     US 5662907 50.40    A     19970902      US 1994-186266    19940125 <--
PRAI US 1992-926666              19920807 <--
     US 1993-27746               19930305 <--
     US 1993-103396              19930806 <--
     US 1993-159339              19931129
AB   Disclosed are methods for making peptides comprising an HLA-A24.1-, HLA-A1-,
     HLA-A11-, and HLA-A3.2-restricted T cell epitope consisting of about 8-11
     amino acid residues, and methods of making a peptide that binds to an HLA-
     A24.1, HLA-A1, HLA-A11, and HLA-A3.2 mol. at a dissocn. const. of less than
     500 nM. Epitopes on a no. of potential target proteins (e.g. prostate
     specific antigen, hepatitis B core and surface antigens, hepatitis C antigen,
     malignant melanoma antigen MAGE-1, Epstein-Barr virus antigens, HIV-1 and
     papilloma virus antigen) are identified. These HLA-binding peptides are
     useful for treating and diagnosing a no. of pathol. states such as viral
     infection and cancer.
IT   196514-61-1 245443-36-1
        (HLA binding epitopes of viral and tumor antigen for treatment and
```

diagnosis)
RN 196514-61-1 HCAPLUS
CN L-Arginine, L-methionyl-L-threonyl-L-lysyl-L-isoleucyl-L-leucyl-L-α-glutamyl-L-prolyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

SEQ 1 MTKILEPFR

Absolute stereochemistry.

RN 245443-36-1 HCAPLUS
CN L-Lysine, L-methionyl-L-threonyl-L-lysyl-L-isoleucyl-L-leucyl-L-α-glutamyl-L-prolyl-L-phenylalanyl-L-arginyl- (9CI) (CA INDEX NAME)

SEQ 1 MTKILEPFRK

Absolute stereochemistry.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 3 DGENE COPYRIGHT 2002 DERWENT INFORMATION LTD
AN AAY38261 Peptide DGENE
TI Peptide which specifically binds selected MHC allele - used to induce an immune response for treatment or prevention of viral infection or cancer, or for diagnosis
IN Celis E; Grey H M; Kubo R T; Sette A
PA (CYTE-N) CYTEL CORP.
PI WO 9403205 A1 19940217 50.20 pp 150p
AI **WO 1993-US7421 19930806**
PRAI **US 1993-27746 19930305**
US 1992-926666 19920807
DT Patent
LA English
OS 1994-065403 [08]
AN AAY38261 Peptide DGENE
AB The sequence is a specific example of a group of new immunogenic peptides having an HLA-A3.2, HLA-A1, HLA-A11 or HLA-A24.1 binding motif. For example, the peptides having an HLA-A3.2 binding motif each have 9-10 residues and contain, from the N-terminus to the C-terminus, (a) a first conserved residue selected from L, M, I, V, S, A, T, F, C, G, D and E and (b) a second conserved residue of K, R, Y, H or F, where the first and second conserved residues are separated by 6-7 residues. The peptides are capable of binding selected MHC molecules and inducing an immune response. They can be used to treat and/or prevent viral infection and cancer, e.g. prostate cancer, lymphoma, hepatitis or AIDS. They can also be used to produce antibodies for use as diagnostic or therapeutic agents. The peptides can also be used as diagnostic agents.

SEQ
1 mtkilepfrk
==========

HITS AT: 1-9

L13 ANSWER 3 OF 3 DGENE COPYRIGHT 2002 DERWENT INFORMATION LTD
AN AAY38249 Peptide DGENE
TI Peptide which specifically binds selected MHC allele - used to induce an immune response for treatment or prevention of viral infection or cancer,

or for diagnosis

IN Celis E; Grey H M; Kubo R T; Sette A

PA (CYTE-N) CYTEL CORP.

PI WO 9403205 A1 19940217 50.20 Pr 150p

AI WO 1993-US7421 19930806

PRAI US 1993-27746 19930305

US 1992-926666 19920807

DT Patent

LA English

OS 1994-065403 [08]

AN AAY38249 Peptide DGENE

AB The sequence is a specific example of a group of new immunogenic peptides having an HLA-A3.2, HLA-A1, HLA-A11 or HLA-A24.1 binding motif. For example, the peptides having an HLA-A3.2 binding motif each have 9-10 residues and contain, from the N-terminus to the C-terminus, (a) a first conserved residue selected from L, M, I, V, S, A, T, F, C, G, D and E and (b) a second conserved residue of K, R, Y, H or F, where the first and second conserved residues are separated by 6-7 residues. The peptides are capable of binding selected MHC molecules and inducing an immune response. They can be used to treat and/or prevent viral infection and cancer, e.g. prostate cancer, lymphoma, hepatitis or AIDS. They can also be used to produce antibodies for use as diagnostic or therapeutic agents. The peptides can also be used as diagnostic agents.

SEQ

1 mtkilepfr

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HITS AT: 1-9

=>

SEQ ID NO: 14442

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=> d a65843a12/a ;d query
NAME            CREATED      NOTES/TITLE
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A65843A12/A     06 FEB 2002  3 ANSWERS DUPLICATE REMOVE
                               (0 DUPLICATES REMOVED)
                             2 ANSWERS IN FILE HCAPLUS
                             1 ANSWER IN FILE DGENE
                             HLA-A3  HIV POL 347


L1          404 SEA FILE=REGISTRY AIFQSSMTK/SQSP
L2            5 SEA FILE=REGISTRY L1 AND SQL < 15
L3           24 SEA FILE=HCAPLUS L2
L4            1 SEA FILE=HCAPLUS L3 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)

L5            2 SEA FILE=HCAPLUS L3 AND 19930101-19930806/PD,AD,PRD
L6            2 SEA FILE=HCAPLUS L4 OR L5
L7          166 SEA FILE=DGENE AIFQSSMTK/SQSP
L8           20 SEA FILE=DGENE L7 AND SQL < 15
L9           19 SEA FILE=DGENE L8 NOT (AU9474783/PN OR CA2168950/PN OR
                EP726941/PN OR US5662907/PN OR US5846827/PN OR US6037135/PN OR
                WO9504817/PN)
L10           1 SEA FILE=DGENE L9 AND (AY < 1993 OR PRY < 1993 OR PY < 1993)
L11           1 SEA FILE=DGENE L9 AND 19930101-19930806/PD,AD,PRD
L12           1 SEA FILE=DGENE L10 OR L11
L13           3 DUP REM L6 L12 (0 DUPLICATES REMOVED)


=> d 1-tot bib abs hitseq seq
                                                    2,3?
L13  ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2002 ACS
AN   2000:172837  HCAPLUS
DN   132:221339
TI   Methods for making HLA binding peptides and their uses
IN   Kubo, Ralph T.; Grey, Howard M.; Sette, Alessandro; Celis, Esteban
PA   Epimmune Inc., USA
SO   U.S., 329 pp., Cont.-in-part of U.S. Ser. No. 103,396, abandoned.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 4
     PATENT NO.          KIND  DATE          APPLICATION NO.   DATE
     ----------          ----  --------      ---------------   --------
PI   US 6037135 50.30    A     20000314      US 1993-159339    19931129 <--
     US 5662907 50.40    A     19970902      US 1994-186266    19940125 <--
PRAI US 1992-926666 50.09      19920807 <--
     US 1993-27746 50.10       19930305 <--
     US 1993-103396 50.20      19930806 <--
     US 1993-159339 50.30      19931129
AB   Disclosed are methods for making peptides comprising an HLA-A24.1-, HLA-A1-,
     HLA-A11-, and HLA-A3.2-restricted T cell epitope consisting of about 8-11
     amino acid residues, and methods of making a peptide that binds to an HLA-
     A24.1, HLA-A1, HLA-A11, and HLA-A3.2 mol. at a dissocn. const. of less than
     500 nM. Epitopes on a no. of potential target proteins (e.g. prostate
     specific antigen, hepatitis B core and surface antigens, hepatitis C antigen,
     malignant melanoma antigen MAGE-1, Epstein-Barr virus antigens, HIV-1 and
     papilloma virus antigen) are identified. These HLA-binding peptides are
     useful for treating and diagnosing a no. of pathol. states such as viral
     infection and cancer.
```

IT 148335-25-5
(HLA binding epitopes of viral and tumor antigen for treatment and diagnosis)

RN 148335-25-5 HCAPLUS
CN L-Lysine, L-alanyl-L-isoleucyl-L-phenylalanyl-L-glutaminyl-L-seryl-L-seryl-L-methionyl-L-threonyl- (9CI) (CA INDEX NAME)

SEQ 1 AIFQSSMTK

Absolute stereochemistry.
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2002 ACS
AN 1995:538424 HCAPLUS
DN 122:288925
TI Methods for ex vivo therapy using peptide-loaded antigen-presenting cells for the activation of cytotoxic T lymphocytes
IN Celis, Esteban; Kubo, Ralph; Serra, Horacio; Tsai, Van; Wentworth, Peggy
PA Cytel Corp., USA
SO PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI WO 9504817	A1	19950216	WO 1994-US8672	19940801	<-- 12.00pc
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN					
RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG					
CA 2168950	AA	19950216	CA 1994-2168950	19940801	<--
AU 9474783	A1	19950228	AU 1994-74783	19940801	<--
EP 726941	A1	19960821	EP 1994-924539	19940801	<--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE					
US 5846827	A	19981208	US 1995-468454	19950606	<-- 12.10US
PRAI US 1993-103401		19930806	<-- 12.00US		
WO 1994-US8672		19940801	12.00pc		

AB Methods for activating cytotoxic T lymphocytes (CTL) in vitro are presented in conjunction with methods for using the activated CTL for therapy in vivo. Addnl., a method for killing specific CTL in vivo is presented using antigen-presenting cells which were modified in vitro. The method comprises (1) dissocg. bound peptides from class I MHC mols. on antigen-presenting cells using a mild acid treatment, (2) assocg. desired immunogenic peptides with the class I MHC mols. on the antigen-presenting cells, and (3) incubating the antigen-presenting cells with the cytotoxic T cells in the presence of a growth factor, thereby producing activated cytotoxic T cells. The step of dissocg. bound peptides is carried out by incubating the antigen-presenting cells (e.g., SAC-I-activated peripheral blood mononuclear cells) in a glycine or citrate-phosphate buffer soln. at pH 3. Immunogenic peptides are assocd. with MHC mols. by incubation of the antigen-presenting cells with 10-50 μg/mL immunogenic peptide, followed by incubation of the cells with the cytotoxic T cells for about 7-10 days. The growth factors can be interleukin-7 added at day 0 and day 7, or interleukin-2 added after day 7. Of the immunogenic peptides tested to date, 12 of 60 MAGE peptides, 13 of 53 HIV peptides, 3 of 25 hepatitis C virus peptides, and 7 of 28 hepatitis B virus peptides induced

primary CTL in vitro. The cytotoxic T cells are useful in the treatment of cancer, AIDS, hepatitis, bacterial infection, fungal infection, malaria, or tuberculosis.

IT **148335-25-5**
(methods for ex vivo therapy using peptide-loaded antigen-presenting cells for the activation of cytotoxic T lymphocytes)

RN 148335-25-5 HCAPLUS
CN L-Lysine, L-alanyl-L-isoleucyl-L-phenylalanyl-L-glutaminyl-L-seryl-L-seryl-L-methionyl-L-threonyl- (9CI) (CA INDEX NAME)

SEQ 1 AIFQSSMTK

Absolute stereochemistry.

L13 ANSWER 3 OF 3 DGENE COPYRIGHT 2002 DERWENT INFORMATION LTD
AN AAR49235 Protein DGENE
TI Peptide which specifically binds selected MHC allele - used to induce an immune response for treatment or prevention of viral infection or cancer, or for diagnosis
IN Celis E; Grey H M; Kubo R T; Sette A
PA (CYTE-N) CYTEL CORP.
PI WO 9403205 A 19940217 50, 20pc 150p
AI **WO 1993-US7421** **19930806**
PRAI **US 1992-926666** **19920807**
US 1993-27746 **19930305**

DT Patent
LA English
OS 1994-065403 [08]
AN AAR49235 Protein DGENE
AB The sequences given in AAR47304-33 and AAR49201-44 are immunogenic peptides which have a HLA-A3.2, HLA-A1 or a HLA-A11 binding motif. These peptides may be used in the composition of the invention. These peptides are capable of binding selected MHC molecules and inducing an immune response. They can be used to treat and/or prevent viral infection and cancer, eg. prostate cancer, lymphoma, hepatitis or AIDS. They can also be used to produce antibodies for use as diagnostic or therapeutic agents. The peptides can also be used as diagnostic agents.

SEQ
1 aifqssmtk
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HITS AT: 1-9

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